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U S CIVIL AIRMEN STATISTICS 1985 AND 1986(U) FEDERAL
AVIATION ADMINISTRATION WASHINGTON DC OFFICE OF
MANAGEMENT SYSTEMS P W CARTER 30 JUN 87

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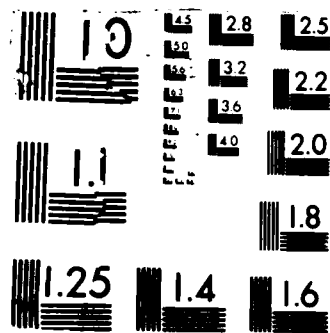
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FAA Statistical Pandbook of Aviation is a convenient source for historical data. It presents statistical information pertaining to the Federal Aviation Administration, the National Airspace System, Airports, Airport Activity, U.S. Civil Air Carrier Fleet, U.S. Civil Air Carrier Operating Data, Airmen, General Aviation Aircraft, Aircraft Accidents, Aeronautical Production & Import/Export.

Reporting period: Calendar Year
Latest edition: 1985 data
Order from: U.S. Government Printing Office OR
National Technical Information Service

Date 1986 information
will be available: Various

Date next publication
is scheduled: December 1987 (1986 data)

Person to contact: Patricia Beardsley/Nancy Trembley

U.S. Civil Airmen Statistics is an annual study of detailed airmen statistics. It contains calendar year statistics on pilot and nonpilots and the number of certificates issued.

Reporting period: Calendar Year
Latest edition: 1986 and 1985 data
Order from: Management Standards & Statistics Division OR
National Technical Information Service

Date 1987 information
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Person to contact: Patricia Carter



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Census of U.S. Civil Aircraft is an annual publication that includes statistical data on the registered civil fleet, air carrier aircraft, and general aviation aircraft--both registered and active, detailed reports for general aviation aircraft by owner's state and county, and registered aircraft by make and model.

Reporting period:	Calendar Year
Latest edition:	1986 data
Order from:	U.S. Government Printing Office OR National Technical Information Service
Date 1987 Information will be available:	June 1988
Date next publication is scheduled:	September 1988 (1987 data)
Person to contact:	Patricia Beardsley

FAA Air Traffic Activity furnishes terminal and en route air traffic activity information (e.g., takeoffs & landings, flight plans filed) of the National Airspace System. The data is collected/compiled from the FAA-operated Airport Traffic Control Towers, Air Route Traffic Control Centers, Flight Service Stations, Approach Control Facilities, and FAA Contract-towered airports.

Reporting period:	Fiscal Year
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Date 1987 information will be available:	March 1988
Date next publication is scheduled:	June 1988 (1987 data)
Person to contact:	Nancy Trembley

General Aviation Pilot and Aircraft Activity Survey includes data on the type and source of aircraft flight plan and weather information services, trip length in time and distance, pilot age and certification, estimates of total 1984 general aviation operations, fuel consumption and aircraft miles flown. The survey was made by the Federal Aviation Administration with the assistance of the Civil Air Patrol.

Reporting period:	Survey conducted in 3-year intervals
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SURVEY HAS BEEN DISCONTINUED

General Aviation Activity and Avionics Survey publication presents the results of the General Aviation Activity and Avionics Survey conducted to obtain information on the activity and avionics of the U.S. registered general aviation aircraft fleet. The survey reveals estimated flying time of the active general aviation aircraft, and other statistics by manufacturer/model group, aircraft type, state and region of based aircraft, and primary use. Estimates are included on fuel consumption, lifetime airframe hours, avionics, and engine hours.

Reporting period:	Calendar Year
Latest edition:	1985 data
Order from:	Government Printing Office or National Technical Information Service

Date 1986 Information will be available:	November 1987
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Date next publication is available:	December 1987 (1986 data)
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Person to contact:	Shung-Chai Huang
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FAA Directory is published twice a year, it contains six sections of data: Washington/Region/Center headquarters' managers; field facilities' managers/supervisors; regional area maps/organizational charts; alphabetical listing; special interest groups; and Glossary.

Latest edition:	November 1986
Order from:	Government Printing Office

Date next publication is scheduled:	November 1987
	*There will be <u>NO</u> May 1987 edition.

Person to contact:	Nancy Trembley
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Airport Activity Statistics of Certificated Route Air Carriers is a joint publication of the Federal Aviation Administration (FAA) and the Research & Special Programs Administration (RSPA). RSPA furnishes airport activity data on certificated route air carriers; FAA organizes/publishes it. Included in the data are passenger enplanements, tons of enplaned freight, express and mail. Both scheduled/nonscheduled service and

domestic/international operations shown by airport and carrier are also included. Breakdown of data includes departures/enplanements/cargo/mail by airport, carrier & type of operation, and type of aircraft.

Reporting period:	Calendar Year
Latest edition:	1985 data
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Person to contact:	Patricia Beardsley
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PREFACE

The U.S. Civil Airmen Statistics is an annual study published to meet the demands of FAA, other government agencies, and industry for more detailed airmen statistics than those published in other FAA reports.

Statistics pertaining to airmen, both pilot and nonpilot, were obtained from the official airman certification records maintained at the FAA Aeronautical Center, Oklahoma City, Oklahoma.

An active Airmen is one who hold both an airmen certificate and a valid medical certificate. Airmen who must have a valid medical to exercise the privileges of their certificate are all airplane pilots, control tower operators, flight navigators, and lighter-than-air pilots are not required to have a medical examination but the numbers represent only those who had a valid medical certificate. Mechanics, parachute riggers, ground instructors, and dispatchers certificates represent all certificates on record at the Aeronautical Center.

This study was prepared in the Office of Management Systems, Management Standards and Statistics Division, Statistical Analysis Branch (AMS-420), by Patricia W. Carter.

DISTRIBUTION: ZMS-348E

C O N T E N T S

	Page
I. Active Pilot Certificates Held	3
II. Active Nonpilot Certificates Held	31
III. Pilot Certificates Issued	41

Tables

1. Active Pilot Certificates Held: December 31, 1977-1986	4
2. Active Women Pilot Certificates Held: December 31, 1977-1986	5
3. Active Pilot and Nonpilot Certificates Held, by Class of Certificates, and by FAA Region: December 31, 1986	6
3a. Active Pilot and Nonpilot Certificates Held, by Class of Certificates, and by FAA Region: December 31, 1985	9
4. Active Pilots and Flight Instructors by FAA Region and State: December 31, 1986	12
4a. Active Pilots and Flight Instructors by FAA Region and State: December 31, 1985	14
5. Active Women Pilots and Flight Instructors by FAA Region and State: December 31, 1986	16
5a. Active Women Pilots and Flight Instructors by FAA Region and State: December 31, 1985	18
6. Active Helicopter Pilots by Class of Certificates: December 31, 1986	20
6a. Active Helicopter Pilots by Class of Certificates: December 31, 1985	21
7. Active Glider Pilots by Class of Certificates: December 31, 1986 ...	22
7a. Active Glider Pilots by Class of Certificates: December 31, 1985 ...	23
8. Active Helicopter and Glider Pilots: December 31, 1982-86	24
9. Total Pilots and Instrument Rated Pilots: December 31, 1982-86	24
10. Active Pilot Certificates Held by Category and Age Group of Holder: 1986, 1985, 1982	25
11. Instrument Rating Held by Class of Certificates: December 31, 1986 and 1985	26

C O N T E N T S (Continued)

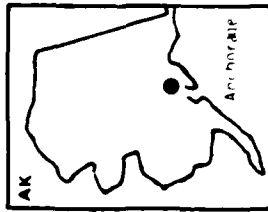
	Page
12. Instrument Ratings Held, by Class of Certificates, by FAA Region: December 31, 1986	27
12a. Instrument Ratings Held, by Class of Certificates, by FAA Region: December 31, 1985	29
13. Active Nonpilot Airmen Certificates Held, by FAA Region and State: December 31, 1986	32
13a. Active Nonpilot Airmen Certificates Held, by FAA Region and State: December 31, 1985	34
14. Active Women Nonpilot Certificates Held, by FAA Region and State: December 31, 1986	36
14a. Active Women Nonpilot Certificates Held, by FAA Region and State: December 31, 1985	38
15. Pilot Certificates Issued, by Category: December 31, 1982-86	42
16. Pilot Certificates Issued, by Category and Conductor: December 31, 1986	43
16a. Pilot Certificates Issued, by Category and Conductor: December 31, 1985	44
17. Instrument Ratings Issued: 1986, 1985, 1982	45
18. Student Certificates Issued, by Month: December 31, 1982-86	46

Illustration

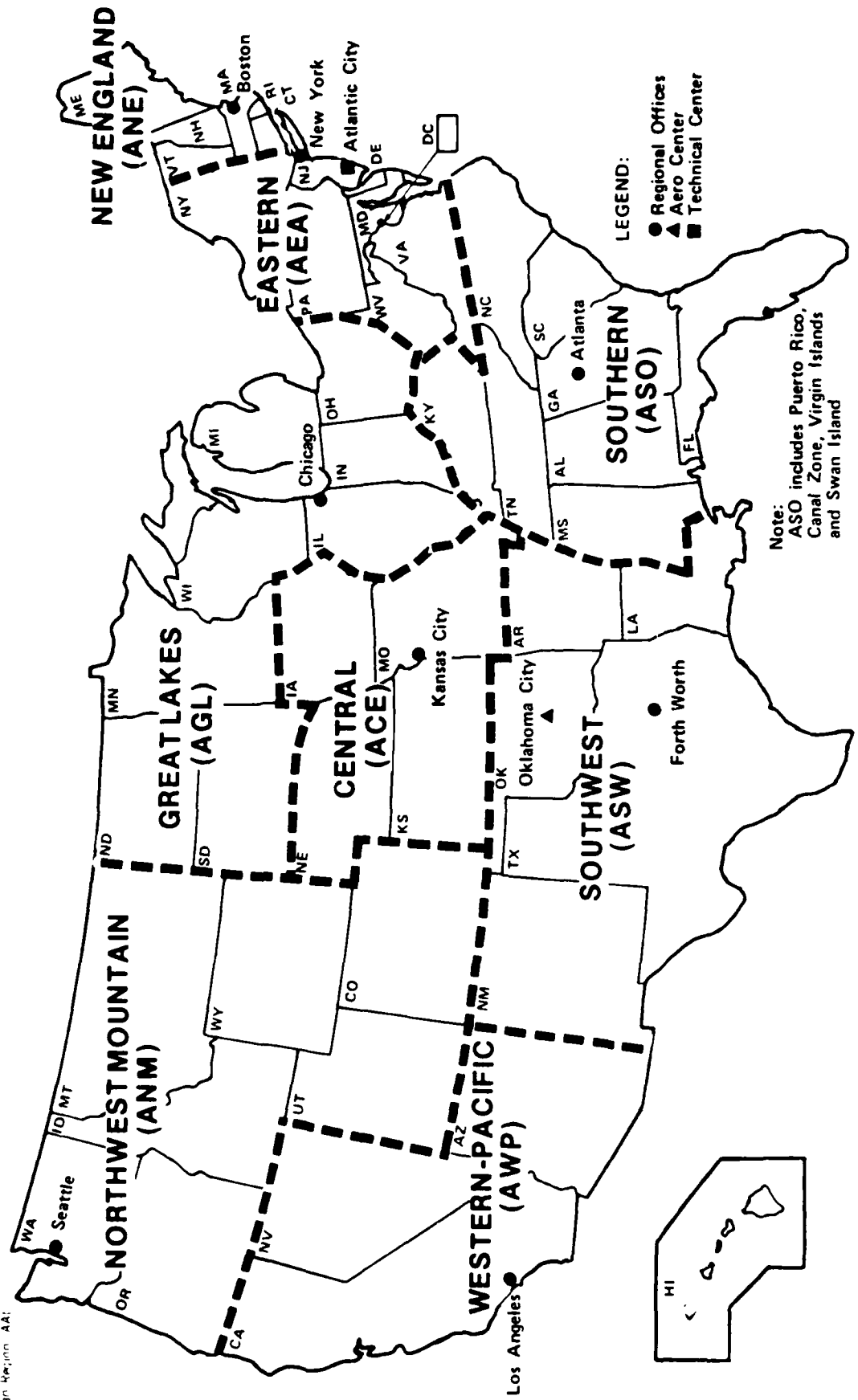
FAA Regional Boundaries	1
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FAA REGIONAL BOUNDARIES

Includes Locations of Regional Headquarters and Centers



Alaska in Region AAI



I. ACTIVE PILOT CERTIFICATES HELD

TABLE 1

ESTIMATED ACTIVE PILOT CERTIFICATES HELD: DECEMBER 31, 1977 - 1986

Category	1977	1978	1979	1980 ^{1/}	1981	1982	1983	1984	1985	1986
Pilot—Total	782,932	798,833	814,667	827,071	764,182	733,255	718,004	722,376	709,540	709,118
Student	203,510	204,874	210,180	199,833	179,912	156,361	147,197	150,081	146,652	150,273
Private	327,424	337,644	343,276	357,479	328,562	322,094	318,643	320,086	311,086	305,736
Commercial	188,763	185,833	182,057	183,442	168,580	165,093	159,455	155,929	151,632	147,758
Airline Transport	50,145	55,881	63,652	69,565	70,311	73,471	75,938	78,152	82,740	87,186
Helicopter (only)	4,819	4,874	5,218	6,030	6,453	7,034	7,237	7,532	8,123	8,581
Glider (only) ^{2/}	6,208	6,541	6,796	7,029	7,388	7,842	8,157	8,390	8,168	8,411
Lighter-than-air ^{2/}	3,055	3,186	3,448	3,679	2,976	1,360	1,337	1,166	1,135	1,133
Nonpilot—Total ^{r/}	323,477	336,962	351,981	368,356	382,840	399,661	413,199	426,802	395,139	410,079
Mechanic ^{3/}	220,768	228,743	237,611	250,157	262,705	277,436	288,335	298,028	274,100	284,241
Parachute Rigger ^{3/}	8,954	9,200	9,381	9,547	9,716	9,893	10,074	10,194	9,395	9,535
Ground Instructor ^{3/}	55,717	57,738	59,680	61,550	63,246	65,004	66,385	67,463	58,214	59,443
Dispatcher ^{3/}	5,572	6,161	6,446	6,799	7,094	7,580	8,222	8,980	8,511	9,025
Flight Navigator	2,155	2,092	1,994	1,936	1,785	1,695	1,636	1,603	1,542	1,512
Flight Engineer	29,871	33,028	36,869	38,367	38,294	38,053	38,566	40,534	43,377	46,323
Flight Instructor Certificates ^{4/}	49,362	52,201	54,398	60,440	57,523	62,492	62,201	61,173	58,940	57,355
Instrument Ratings ^{5/}	226,334	236,312	247,096	260,461	252,535	255,073	254,271	256,584	258,559	262,388

^{1/} For 1980 only, a valid medical certificate was defined as one that was issued within the last 27 months.^{2/} Glider and lighter-than-air pilots are not required to have a medical examination; however, the totals above represent pilots who received a medical examination within the last 25 months.^{3/} Numbers represent all certificates on record. No medical examination required.^{4/} Not included in total.^{5/} Special ratings shown on pilot certificates, do not indicate additional certificates.^{r/} Revised.

TABLE 2
ESTIMATED ACTIVE WOMEN PILOT CERTIFICATES HELD: DECEMBER 1977 - 1986

Category of Certificates Held	1977	1978	1979	1980 ^{1/}	1981	1982	1983	1984	1985	1986
Pilot—Total	47,296	45,874	51,733	52,902	47,721	45,305	43,648	44,339	43,483	43,082
Student	25,705	26,354	26,714	26,006	22,591	19,958	18,696	19,435	19,058	18,695
Private	17,702	19,267	20,275	21,554	19,602	19,388	18,801	18,616	17,974	17,532
Commercial	3,090	3,306	3,618	3,993	4,101	4,257	4,281	4,232	4,185	4,176
Airline Transport	193	270	361	480	584	749	884	1,032	1,184	1,334
Helicopter (only)	18	17	27	55	87	113	144	167	196	232
Glider (only) ^{2/}	391	433	461	496	540	574	599	631	653	667
Lighter-than-air ^{2/}	195	227	277	318	216	266	243	226	233	242
Nonpilot—Total ^{3/}	3,672	3,984	4,350	4,779	5,201	5,697	6,151	6,591	6,017	6,502
Mechanic ^{3/}	505	600	695	890	1,051	1,298	1,493	1,649	1,775	1,964
Parachute Rigger ^{3/}	535	544	553	562	580	593	605	614	412	414
Ground Instructor ^{3/}	2,525	2,682	2,852	3,015	3,213	3,391	3,554	3,680	2,980	3,087
Dispatcher ^{3/}	65	76	105	141	167	195	249	310	394	460
Flight Engineer	42	82	145	171	189	215	248	336	455	577
Flight Navigator	0	0	0	0	1	1	2	2	1	0
Flight Instructor ^{4/}	1,238	1,458	1,695	2,075	2,165	2,532	2,685	2,736	2,731	2,687

Note: Instrument ratings not reported.

^{1/} For 1980 only, a valid medical certificate was defined as one that was issued within the last 27 months.

^{2/} Glider and lighter-than-air pilots are not required to have a medical examination; however, the totals above represent pilots who received a medical examination within the last 25 months.

^{3/} Numbers represent all certificates on record. No medical examination required.

^{4/} Not included in total.

^{5/} Revised.

TABLE 3

ESTIMATED ACTIVE PILOT AND NONPILOT CERTIFICATES HELD, BY CLASS OF CERTIFICATES AND BY FAA REGION:
DECEMBER 31, 1986

Class of Certificate	Total <u>1/</u>	Alaskan	Central	Eastern	Great Lakes	New England	Northwest Mountain	Southern	Southwest	Western-Pacific	Outside U.S. <u>2/</u>
Total—All Pilots	705,118	11,212	36,574	92,287	116,864	34,188	66,826	116,459	88,968	127,500	18,260
Student Pilots—Total	150,273	2,185	6,380	22,392	25,360	8,537	13,484	24,952	17,836	26,274	2,873
Private Pilots—Total	305,736	5,204	18,519	38,014	56,875	14,330	29,515	45,610	37,651	56,603	3,015
Private Airplane (only)	295,607	5,058	18,496	36,485	55,523	13,910	28,451	43,811	36,498	54,536	2,839
Private Airplane, Private Glider	4,144	30	156	729	637	207	385	604	382	976	38
Private Airplane, Commercial Glider	772	3	18	153	107	50	102	84	67	182	4
Private Airplane, Private Gyroplane	25	0	2	5	8	2	0	1	3	4	0
Private Airplane, Private Helicopter	1,288	15	64	145	175	57	149	235	185	225	38
Private Airplane, Private Glider, Private Helicopter	47	0	2	10	6	4	4	7	4	10	0
Private Airplane, Commercial Helicopter	3,805	97	181	478	414	100	419	855	510	657	94
Private Airplane, Private Glider, Commercial Helicopter	33	0	0	4	2	0	5	9	1	10	2
Private Airplane, Commercial Glider, Commercial Helicopter	14	1	0	3	2	0	0	4	1	3	0
Private Airplane, Commercial Gyroplane, Commercial Helicopter	1	0	0	0	1	0	0	0	0	0	0
Commercial Pilots—Total	147,798	2,682	7,598	18,190	21,632	6,081	13,672	26,212	20,137	26,167	5,427
Commercial Airplane (only)	125,235	2,294	6,634	15,133	19,222	5,207	11,379	21,381	17,112	21,766	5,107
Commercial Airplane, Private Glider	1,848	22	89	333	287	87	230	344	236	504	16
Commercial Airplane, Commercial Glider	3,583	24	159	612	526	214	463	624	458	869	34
Commercial Airplane, Commercial Gyroplane, Commercial Glider	1	0	0	0	0	0	0	0	0	1	0

TABLE 3 (Continued)

ESTIMATED ACTIVE PILOT AND NONPILOT CERTIFICATES HELD, BY CLASS OF CERTIFICATES AND BY FAA REGION:
DECEMBER 31, 1986

Class of Certificate	Total 1/	Alaskan	Central	Eastern	Great Lakes	New England	Northwest Mountain	Southern	Southwest	Western-Pacific	Outside U.S. 2/
Commercial Airplane, Private Helicopter	262	6	7	25	51	12	29	50	25	47	6
Commercial Airplane, Commercial Glider, Private Helicopter	16	0	1	3	5	0	0	1	1	4	1
Commercial Airplane, Commercial Helicopter	15,335	323	678	1,964	1,437	523	1,481	3,675	2,210	2,792	252
Commercial Airplane, Private Glider, Commercial Helicopter	156	0	7	21	29	5	15	32	17	26	2
Commercial Airplane, Commercial Glider, Commercial Helicopter	609	10	21	96	66	30	69	99	67	142	9
Commercial Airplane, Commercial Helicopter, Commercial Gyroplane	23	1	1	2	5	2	2	3	3	4	0
Commercial Airplane, Commercial Gyroplane	21	1	1	1	3	1	4	2	3	5	0
Commercial Airplane, Commercial Gyroplane, Commercial Helicopter, Commercial Glider	9	1	0	0	1	0	0	1	1	5	0
Airline Transport Pilots—Total	<u>87,186</u>	<u>974</u>	<u>3,130</u>	<u>10,602</u>	<u>11,011</u>	<u>4,249</u>	<u>8,281</u>	<u>16,492</u>	<u>11,365</u>	<u>14,572</u>	<u>6,510</u>
Airline Transport Airplane (only)	85,714	936	3,056	10,349	10,876	4,145	8,169	16,214	11,107	14,353	6,467
Airline Transport Airplane, Airline Transport Helicopter	1,472	38	32	253	135	104	112	278	258	215	43
Rotorcraft (only) Pilots—Total	<u>8,581</u>	<u>141</u>	<u>348</u>	<u>1,218</u>	<u>719</u>	<u>432</u>	<u>638</u>	<u>2,363</u>	<u>1,226</u>	<u>1,195</u>	<u>301</u>
Private Gyroplane	9	0	0	0	1	1	2	2	1	1	1
Private Helicopter	892	7	28	119	86	123	76	99	87	236	31
Commercial Helicopter	7,230	122	315	1,049	609	293	532	2,196	1,003	916	195
Commercial Helicopter, Private Glider	6	0	0	3	1	1	0	1	0	0	0
Commercial Helicopter, Commercial Glider	6	0	1	1	0	0	0	1	1	1	1
Commercial Gyroplane	1	0	1	0	0	0	0	0	0	0	0

TABLE 3 (Continued)

ESTIMATED ACTIVE PILOT AND NONPILOT CERTIFICATES HELD, BY CLASS OF CERTIFICATES AND BY FAA REGION:
DECEMBER 31, 1986

Class of Certificate	Total ^{1/}	Alaskan	Central	Eastern	Great Lakes	New England	Northwest Mountain	Southern	Southwest	Western-Pacific	Outside U.S. ^{2/}
Commercial Helicopter, Commercial Gyroplane	2	0	0	0	2	0	0	0	0	0	0
Airline Transport Helicopter	435	12	3	46	20	14	28	64	134	41	73
Glider (only)—Total	<u>8,411</u>	<u>19</u>	<u>127</u>	<u>1,701</u>	<u>1,032</u>	<u>505</u>	<u>1,118</u>	<u>691</u>	<u>582</u>	<u>2,504</u>	<u>127</u>
Private Glider	7,168	5	113	1,450	903	411	835	607	496	2,228	110
Commercial Glider	1,243	4	14	251	129	94	283	84	86	281	17
Lighter-Than-Air	<u>1,133</u>	<u>7</u>	<u>72</u>	<u>170</u>	<u>215</u>	<u>54</u>	<u>118</u>	<u>139</u>	<u>171</u>	<u>180</u>	<u>7</u>
Total—All Nonpilot	<u>412,079</u>	<u>5,410</u>	<u>20,518</u>	<u>60,355</u>	<u>53,400</u>	<u>18,076</u>	<u>33,934</u>	<u>68,692</u>	<u>53,533</u>	<u>78,446</u>	<u>19,311</u>
Mechanic ^{3/}	284,241	3,079	16,210	43,369	36,320	12,367	21,595	45,616	37,102	55,636	12,947
Parachute Rigger ^{3/}	9,535	154	421	1,606	1,216	342	1,285	1,828	958	1,577	148
Ground Instructor ^{3/}	59,443	726	3,035	8,298	9,454	2,612	5,302	9,857	8,035	10,663	1,417
Dispatcher ^{3/}	9,025	139	143	1,880	813	234	443	1,559	606	1,373	1,835
Flight Navigator	1,512	5	12	233	46	163	148	252	84	453	116
Flight Engineer	46,323	307	1,097	4,973	5,551	2,356	5,161	9,540	5,744	8,744	2,848
Flight Instructor Certificates—Total ^{4/}	<u>57,355</u>	<u>815</u>	<u>2,973</u>	<u>8,179</u>	<u>9,777</u>	<u>2,627</u>	<u>5,730</u>	<u>9,442</u>	<u>7,541</u>	<u>9,507</u>	<u>764</u>
Instrument Ratings ^{5/}	<u>262,388</u>	<u>3,570</u>	<u>12,188</u>	<u>33,897</u>	<u>38,897</u>	<u>11,789</u>	<u>23,376</u>	<u>48,531</u>	<u>34,202</u>	<u>45,535</u>	<u>10,403</u>

^{1/} Includes Outside U.S. total.^{2/} Outside U.S. includes airmen certificated by the FAA who live outside the 50 states or foreign countries.^{3/} Total ratings issued to date. These ratings retain their validity without periodic medical examinations.^{4/} Not included in total.^{5/} Special ratings shown on pilot certificates, do not indicate additional ratings.

TABLE 3a

ESTIMATED ACTIVE PILOT AND NONPILOT CERTIFICATE HELD, BY CLASS OF CERTIFICATE AND BY PMA REGION:
DECEMBER 31, 1985

Class of Certificate	Total 1/	Alaskan	Central	Eastern	Great Lakes	New England	Northwest Mountain	Southern	Southwest	Western-Pacific	Outside U.S. 2/
Total--All Pilots	709,540	11,793	37,688	91,386	117,069	33,210	67,383	113,720	91,452	128,190	17,649
Student Pilots--Total	146,652	2,404	6,434	21,465	24,545	8,069	13,186	23,731	18,170	25,881	2,767
Private Pilots--Total	311,086	5,437	19,879	38,235	58,076	14,120	30,468	45,238	38,979	57,580	3,074
Private Airplane (only)	301,021	5,296	19,449	36,717	56,723	13,712	29,410	43,435	37,784	55,601	2,894
Private Airplane, Private Glider	4,234	31	158	757	648	205	397	621	421	941	35
Private Airplane, Commercial Glider	767	3	16	157	102	49	103	85	71	178	3
Private Airplane, Private Gyroplane	29	0	2	6	9	2	0	2	2	6	0
Private Airplane, Private Helicopter	1,236	16	70	139	164	52	145	219	179	222	30
Private Airplane, Private Glider, Private Helicopter	48	0	0	10	8	2	5	9	5	8	1
Private Airplane, Commercial Helicopter	3,713	90	181	445	395	98	405	857	517	614	111
Private Airplane, Private Glider, Commercial Helicopter	21	0	2	2	2	0	2	5	0	0	0
Private Airplane, Commercial Glider, Commercial Helicopter	16	1	1	2	4	0	1	5	0	2	0
Private Airplane, Commercial Gyroplane, Commercial Helicopter	1	0	0	0	1	0	0	0	0	0	0
Commercial Pilots--Total	151,632	2,779	7,810	18,816	22,276	6,043	14,067	26,376	21,206	27,059	5,180
Commercial Airplane (only)	128,749	2,366	6,878	15,769	19,813	5,203	11,733	21,542	18,029	22,568	4,848
Commercial Airplane, Private Glider	2,164	23	82	341	288	84	339	328	242	519	18
Commercial Airplane, Commercial Glider	4,073	25	150	637	566	211	449	637	474	885	39
Commercial Airplane, Commercial Gyroplane, Commercial Glider	1	0	0	0	0	0	0	0	0	1	0

TABLE 3a (Continued)

ESTIMATED ACTIVE PILOT AND NONPILOT CERTIFICATES HELD, BY CLASS OF CERTIFICATE AND BY FAA REGION:
DECEMBER 31, 1985

Class of Certificate	Total 1/	Alaskan	Central	Eastern	Great Lakes	New England	Northwest Mountain	Southern	Southwest	Western-Pacific	Outside U.S. 2/
Commercial Airplane, Private Helicopter	245	6	7	20	48	9	30	66	31	45	3
Commercial Airplane, Commercial Glider, Private Helicopter	19	0	0	4	5	0	1	1	2	5	1
Commercial Airplane, Commercial Helicopter	15,550	346	681	1,922	1,449	496	1,521	3,675	2,345	2,857	258
Commercial Airplane, Private Glider, Commercial Helicopter	162	1	7	23	29	5	16	32	17	30	2
Commercial Airplane, Commercial Glider, Commercial Helicopter	614	9	23	94	68	30	70	109	61	139	11
Commercial Airplane, Commercial Helicopter, Commercial Gyroplane	25	1	1	3	6	2	3	3	2	4	0
Commercial Airplane, Commercial Gyroplane	23	1	1	1	3	2	5	3	3	4	0
Commercial Airplane, Commercial Gyroplane, Commercial Helicopter, Commercial Glider	7	1	0	2	1	1	0	0	0	2	0
Airline Transport Pilots--Total	82,740	1,002	3,020	9,977	10,261	4,083	7,753	15,382	11,140	13,918	6,204
Airline Transport Airplane (only)	81,367	965	2,988	9,745	10,137	3,983	7,453	15,122	10,892	13,710	6,172
Airline Transport Airplane, Airline Transport Helicopter	1,373	37	32	232	124	100	100	266	248	208	32
Rotorcraft (only) Pilots--Total	8,123	145	316	1,081	660	341	683	2,226	1,226	1,143	302
Private Gyroplane	5	0	0	0	1	0	2	0	1	1	0
Private Helicopter	808	8	23	105	93	85	90	93	93	194	24
Commercial Helicopter	6,862	121	291	929	544	243	568	2,083	996	907	178
Commercial Helicopter, Private Glider	5	0	0	3	1	1	0	0	0	0	0
Commercial Helicopter, Commercial Glider	9	0	0	2	0	1	1	3	1	1	0

TABLE 3a (Continued)

ESTIMATED ACTIVE PILOT AND COPILOT CERTIFICATES HELD, BY CLASS OF CERTIFICATE AND BY FAA REGION:
DECEMBER 31, 1985

Class of Certificate	Total ^{1/}	Alaskan	Central	Eastern	Great Lakes	New England	Northwest Mountain	Southern	Southwest	Western-Pacific	Outside U.S. ^{2/}
Commercial Helicopter, Commercial Gyroplane	2	0	0	0	2	0	0	0	0	0	0
Airline Transport Helicopter	432	16	2	42	19	11	22	47	133	40	100
Glider (solo)---Total	<u>8,168</u>	<u>17</u>	<u>126</u>	<u>1,658</u>	<u>1,022</u>	<u>503</u>	<u>1,101</u>	<u>650</u>	<u>554</u>	<u>2,419</u>	<u>118</u>
Private Glider	7,000	14	113	1,421	906	411	833	571	470	2,158	103
Commercial Glider	1,168	3	13	237	116	92	268	79	84	261	15
Lighter-Than-Air	<u>1,139</u>	<u>9</u>	<u>83</u>	<u>154</u>	<u>229</u>	<u>51</u>	<u>125</u>	<u>117</u>	<u>177</u>	<u>190</u>	<u>4</u>
Total---All Nonpilot	<u>395,139</u>	<u>4,353</u>	<u>20,343</u>	<u>58,846</u>	<u>51,387</u>	<u>17,567</u>	<u>32,514</u>	<u>65,444</u>	<u>50,358</u>	<u>75,870</u>	<u>18,457</u>
Mechanic ^{3/}	276,100	3,028	15,756	42,428	34,939	12,038	20,761	43,487	35,503	53,602	12,558
Parachute Rigger ^{3/}	9,395	149	421	1,583	1,212	340	1,264	1,790	944	1,546	146
Ground Instructor ^{3/}	58,214	732	2,993	8,106	9,296	2,575	5,169	9,579	7,939	10,452	1,373
Dispatcher ^{3/}	8,511	129	134	1,800	715	214	416	1,445	560	1,318	1,780
Flight Navigator	1,542	5	13	244	45	159	148	265	83	467	113
Flight Engineer	43,377	310	1,026	4,685	5,180	2,241	4,754	8,878	5,329	8,485	2,487
Flight Instructor Certificates---Total ^{4/}	<u>58,940</u>	<u>797</u>	<u>3,093</u>	<u>8,409</u>	<u>10,036</u>	<u>2,585</u>	<u>5,920</u>	<u>9,470</u>	<u>8,004</u>	<u>9,854</u>	<u>772</u>
Instrument Ratings ^{5/}	<u>258,559</u>	<u>3,570</u>	<u>12,164</u>	<u>33,390</u>	<u>38,392</u>	<u>11,325</u>	<u>23,849</u>	<u>46,927</u>	<u>34,575</u>	<u>44,981</u>	<u>10,186</u>

^{1/} Includes Outside U.S. total.^{2/} Outside U.S. includes airmen certificated by the FAA who live outside the 50 states or foreign countries.^{3/} Total ratings issued to date. These ratings retain their validity without periodic medical examinations.^{4/} Not included in total.^{5/} Special ratings shown on pilot certificates, do not indicate additional ratings.

TABLE 4
ESTIMATED ACTIVE PILOTS AND FLIGHT INSTRUCTORS BY FAA REGION AND STATE:
DECEMBER 31, 1986

FAA Region and State	Total Pilots	Students	Private	Commercial	Airline Transport	Miscellaneous ^{2/}	Flight Instructor ^{3/}
Total ^{1/}	<u>709,116</u>	<u>150,273</u>	<u>305,736</u>	<u>147,796</u>	<u>87,186</u>	<u>18,125</u>	<u>57,355</u>
United States—Total	<u>690,858</u>	<u>147,400</u>	<u>302,721</u>	<u>142,371</u>	<u>80,676</u>	<u>17,690</u>	<u>56,591</u>
Alaskan Region—Total	<u>11,212</u>	<u>2,185</u>	<u>5,204</u>	<u>2,682</u>	<u>974</u>	<u>167</u>	<u>815</u>
Central—Total	<u>36,574</u>	<u>6,380</u>	<u>18,919</u>	<u>7,598</u>	<u>3,130</u>	<u>547</u>	<u>2,973</u>
Iowa	7,905	1,361	4,543	1,504	395	106	604
Kansas	10,296	1,576	5,450	2,240	882	146	841
Missouri	12,830	2,495	5,974	2,573	1,549	239	1,153
Nebraska	5,535	948	2,952	1,281	304	54	375
Eastern—Total	<u>92,287</u>	<u>22,392</u>	<u>38,014</u>	<u>18,190</u>	<u>10,602</u>	<u>3,086</u>	<u>8,179</u>
Delaware	1,616	328	669	361	225	33	190
District of Columbia	672	142	296	146	46	42	54
Maryland	9,894	2,332	4,394	1,909	978	281	864
New Jersey	15,272	3,616	6,075	2,795	2,286	500	1,403
New York	26,112	6,925	10,906	4,963	2,224	1,094	2,225
Pennsylvania	21,063	5,229	9,079	3,668	2,445	642	1,982
Virginia	15,079	3,159	5,379	3,871	2,226	444	1,272
West Virginia	2,579	661	1,216	477	172	53	209
Great Lakes—Total	<u>116,844</u>	<u>25,360</u>	<u>56,875</u>	<u>21,632</u>	<u>11,011</u>	<u>1,966</u>	<u>9,777</u>
Illinois	27,681	6,105	12,746	4,982	3,382	466	2,448
Indiana	12,585	2,825	6,265	2,342	934	219	1,071
Michigan	20,448	4,681	10,233	3,512	1,576	446	1,671
Minnesota	15,775	2,984	7,504	2,966	2,153	168	1,260
North Dakota	3,431	724	1,686	907	96	18	231
Ohio	22,812	5,160	11,013	4,324	1,813	502	2,051
South Dakota	2,649	471	1,354	647	146	31	188
Wisconsin	11,463	2,410	6,074	1,952	911	116	857
New England—Total	<u>34,168</u>	<u>8,537</u>	<u>14,330</u>	<u>6,031</u>	<u>4,249</u>	<u>991</u>	<u>2,627</u>
Connecticut	9,440	2,228	3,564	1,639	1,744	265	752
Maine	3,919	939	1,809	831	290	50	254
Massachusetts	12,807	3,475	5,722	2,138	1,045	427	964
New Hampshire	4,581	988	1,730	869	861	133	384
Rhode Island	1,643	445	709	295	145	49	128
Vermont	1,798	462	796	309	164	67	143

TABLE 4 (continued)

ESTIMATED ACTIVE PILOTS AND FLIGHT INSTRUCTORS BY FAA REGION AND STATE:
DECEMBER 31, 1986

FAA Region and State	Total Pilots	Students	Private	Commercial	Airline Transport	Miscellaneous ^{2/}	Flight Instructor ^{3/}
Northwest Mountain—Total	<u>66,826</u>	<u>13,484</u>	<u>29,515</u>	<u>13,672</u>	<u>8,281</u>	<u>1,874</u>	<u>5,734</u>
Colorado	18,523	4,318	6,884	3,490	2,990	841	1,811
Idaho	4,347	743	2,197	1,006	332	64	355
Montana	4,323	767	2,250	577	274	51	351
Oregon	10,145	1,857	5,392	2,090	598	210	788
Utah	5,479	1,277	2,444	1,002	604	147	410
Washington	21,593	3,869	9,051	4,640	3,304	524	1,851
Wyoming	2,416	450	1,297	464	176	29	181
Southern—Total	<u>116,459</u>	<u>26,952</u>	<u>45,610</u>	<u>26,212</u>	<u>16,490</u>	<u>3,190</u>	<u>9,404</u>
Alabama	9,301	1,823	3,640	2,397	628	813	851
Florida	45,466	9,122	17,797	10,756	6,964	803	3,711
Georgia	17,903	3,705	6,181	3,901	3,753	363	1,344
Kentucky	5,860	1,359	2,625	1,007	626	243	504
Mississippi	4,959	1,149	1,964	1,443	314	87	361
North Carolina	14,330	3,454	5,985	2,865	1,611	411	1,044
South Carolina	6,795	1,664	2,765	1,626	612	124	484
Tennessee	11,845	2,672	4,651	2,217	1,980	325	1,044
Southwest—Total	<u>88,968</u>	<u>17,836</u>	<u>37,651</u>	<u>20,137</u>	<u>11,365</u>	<u>1,974</u>	<u>7,561</u>
Arkansas	6,129	1,319	2,733	1,596	406	72	491
Louisiana	9,545	1,942	3,817	2,605	864	335	804
New Mexico	5,435	1,245	2,346	1,202	432	210	430
Oklahoma	12,305	2,514	6,132	2,584	884	187	901
Texas	55,534	10,812	22,623	12,150	8,774	1,175	4,864
Western-Pacific—Total	<u>127,500</u>	<u>26,274</u>	<u>56,603</u>	<u>26,167</u>	<u>14,572</u>	<u>3,884</u>	<u>9,501</u>
Arizona	15,407	3,207	6,807	3,270	1,595	528	1,249
California	103,148	21,101	46,723	20,913	11,427	2,984	7,527
Hawaii	3,327	842	864	793	603	225	246
Nevada	5,618	1,124	2,209	1,191	947	147	485
Outside U.S.—Total ^{4/}	<u>18,260</u>	<u>2,873</u>	<u>3,015</u>	<u>5,427</u>	<u>6,510</u>	<u>435</u>	<u>764</u>
Other U.S. Areas	<u>2,071</u>	<u>652</u>	<u>685</u>	<u>355</u>	<u>347</u>	<u>31</u>	<u>0</u>
American Samoa	5	0	0	1	4	0	0
Canal Zone	2	1	0	1	0	0	0
Guam	122	37	22	21	42	0	0
Puerto Rico	1,593	537	541	254	231	28	0
Virgin Island	346	76	122	76	69	3	0
Wake Island	3	1	0	1	1	0	0

^{1/} Includes Outside U.S.^{2/} Includes helicopter, glider, and lighter-than-air.^{3/} Not included in total.^{4/} Outside U.S. includes Other U.S. Areas outside of the 50 states and foreign countries.

TABLE 4a
ESTIMATED ACTIVE PILOTS AND FLIGHT INSTRUCTORS BY FAA REGION AND STATE:
DECEMBER 31, 1985

FAA Region and State	Total Pilots	Students	Private	Commercial	Airline Transport	Miscellaneous 2/	Flight Instructor 3/
Total 1/	<u>709,540</u>	<u>146,652</u>	<u>311,086</u>	<u>151,632</u>	<u>82,740</u>	<u>17,430</u>	<u>58,940</u>
United States--Total	<u>691,891</u>	<u>143,885</u>	<u>308,012</u>	<u>146,452</u>	<u>76,536</u>	<u>17,006</u>	<u>58,168</u>
Alaskan Region--Total	<u>11,793</u>	<u>2,404</u>	<u>5,437</u>	<u>2,779</u>	<u>1,002</u>	<u>171</u>	<u>797</u>
Central--Total	<u>37,688</u>	<u>6,434</u>	<u>19,879</u>	<u>7,830</u>	<u>3,020</u>	<u>525</u>	<u>3,093</u>
Iowa	8,445	1,435	4,920	1,595	380	115	64
Kansas	10,750	1,711	5,677	2,315	889	158	902
Missouri	12,725	2,400	6,059	2,590	1,459	217	1,147
Nebraska	5,768	888	3,223	1,330	292	35	403
Eastern--Total	<u>91,386</u>	<u>21,465</u>	<u>38,235</u>	<u>18,816</u>	<u>9,977</u>	<u>2,893</u>	<u>8,409</u>
Delaware	1,566	294	666	367	205	34	166
District of Columbia	680	162	285	145	49	39	60
Maryland	9,677	2,334	4,251	1,946	898	248	849
New Jersey	15,495	3,506	6,283	2,940	2,304	462	1,473
New York	26,093	6,671	11,095	5,154	2,113	1,060	2,318
Pennsylvania	20,522	4,956	9,011	3,722	2,243	590	2,008
Virginia	14,722	2,921	5,372	4,031	1,994	404	1,318
West Virginia	2,631	621	1,272	511	171	56	217
Great Lakes--Total	<u>117,069</u>	<u>24,545</u>	<u>58,076</u>	<u>22,276</u>	<u>10,261</u>	<u>1,921</u>	<u>10,036</u>
Illinois	27,921	5,989	13,093	5,271	3,094	474	2,495
Indiana	12,466	2,749	6,273	2,381	873	190	1,109
Michigan	20,182	4,407	10,365	3,529	1,452	429	1,628
Minnesota	15,641	2,879	7,420	3,000	1,973	169	1,282
North Dakota	3,491	733	1,755	889	89	25	244
Ohio	22,957	4,920	11,287	4,499	1,764	487	2,134
South Dakota	2,776	497	1,439	680	135	25	205
Wisconsin	11,635	2,371	6,244	2,027	881	112	939
New England--Total	<u>33,210</u>	<u>8,069</u>	<u>14,120</u>	<u>6,043</u>	<u>4,083</u>	<u>895</u>	<u>2,585</u>
Connecticut	9,272	2,136	3,528	1,669	1,694	245	753
Maine	3,764	869	1,798	792	263	42	251
Massachusetts	12,505	3,307	5,721	2,092	1,002	383	939
New Hampshire	4,297	902	1,585	870	821	119	378
Rhode Island	1,608	404	713	310	140	41	122
Vermont	1,764	451	775	310	163	65	142

TABLE 4a (Continued)

ESTIMATED ACTIVE PILOTS AND FLIGHT INSTRUCTORS BY FAA REGION AND STATE:
DECEMBER 31, 1985

FAA Region and State	Total Pilots	Students	Private	Commercial	Airline Transport	Miscellaneous 2/	Flight Instructor 3/
Northwest Mountain--Total	67,383	13,186	30,468	14,067	7,753	1,909	5,920
Colorado	10,556	4,256	7,117	3,547	2,786	850	1,774
Idaho	4,455	762	2,267	1,032	314	80	390
Montana	4,535	824	2,372	1,025	257	57	384
Oregon	10,420	1,856	5,663	2,108	571	222	823
Utah	5,317	1,135	2,439	1,032	558	153	428
Washington	21,563	3,869	9,256	4,830	3,095	513	1,908
Wyoming	2,537	484	1,354	493	172	34	213
Southern--Total	113,720	23,731	45,238	26,376	35,382	2,993	9,470
Alabama	9,177	1,799	3,649	2,444	593	492	906
Florida	45,091	8,864	17,904	10,906	6,640	757	3,742
Georgia	17,143	3,394	6,005	3,885	3,490	369	1,357
Kentucky	5,788	1,306	2,590	1,055	581	256	506
Mississippi	4,933	1,094	1,972	1,471	308	88	373
North Carolina	13,577	3,138	5,773	2,840	1,466	360	1,046
South Carolina	6,538	1,549	2,711	1,583	574	121	515
Tennessee	11,473	2,587	4,634	2,192	1,710	350	1,025
Southwest--Total	91,452	18,170	38,979	21,204	11,140	1,957	8,004
Arkansas	6,086	1,225	2,745	1,627	423	66	507
Louisiana	10,100	2,079	4,043	2,771	849	358	850
New Mexico	5,568	1,212	2,505	1,254	408	189	441
Oklahoma	12,749	2,481	6,408	2,768	914	178	1,000
Texas	56,949	11,173	23,278	12,786	8,546	1,166	5,206
Western-Pacific--Total	128,190	25,881	57,580	27,059	13,918	3,752	9,854
Arizona	15,068	3,063	6,724	3,305	1,465	511	1,264
California	104,373	20,960	47,735	21,790	10,994	2,894	7,827
Hawaii	3,256	788	872	821	544	211	267
Nevada	5,493	1,070	2,249	1,143	895	136	496
Outside U.S.--Total 4/	17,649	2,767	3,074	5,180	6,204	424	772
Other U.S. Areas	2,037	646	667	365	325	34	0
American Samoa	0	0	1	5	2	0	0
Canal Zone	2	1	0	0	1	0	0
Guam	116	40	18	19	38	1	0
Puerto Rico	1,575	529	521	271	224	30	0
Virgin Island	332	76	127	69	58	2	0
Wake Island	4	0	0	1	2	1	0

1/ Includes Outside U.S.

2/ Includes helicopter, glider, and lighter-than-air.

3/ Not included in total.

4/ Outside U.S. Includes Other U.S. Areas outside of the 50 states and foreign countries.

TABLE 5
ESTIMATED ACTIVE WOMEN PILOTS AND FLIGHT INSTRUCTORS BY FAA REGION AND STATE:
DECEMBER 31, 1986

FAA Region and State	Total Pilots	Students	Private	Commercial	Airline Transport	Miscellaneous ^{2/}	Flight Instructor ^{3/}
Total ^{1/}	<u>43,082</u>	<u>18,890</u>	<u>17,532</u>	<u>4,176</u>	<u>1,334</u>	<u>1,141</u>	<u>2,667</u>
United States—Total	<u>42,652</u>	<u>18,716</u>	<u>17,397</u>	<u>4,101</u>	<u>1,316</u>	<u>1,122</u>	<u>2,656</u>
Alaskan Region—Total	<u>862</u>	<u>391</u>	<u>397</u>	<u>73</u>	<u>16</u>	<u>5</u>	<u>43</u>
Central - Total	<u>1,928</u>	<u>776</u>	<u>892</u>	<u>179</u>	<u>45</u>	<u>34</u>	<u>109</u>
Iowa	384	148	185	42	3	6	21
Kansas	574	215	274	54	15	12	31
Missouri	707	304	308	59	24	12	44
Nebraska	263	107	125	24	3	4	13
Eastern—Total	<u>5,856</u>	<u>2,731</u>	<u>2,171</u>	<u>597</u>	<u>154</u>	<u>203</u>	<u>383</u>
Delaware	85	37	36	9	2	1	6
District of Columbia	67	22	34	6	4	1	6
Maryland	716	305	295	78	22	16	43
New Jersey	914	416	335	94	27	42	51
New York	1,610	742	601	163	31	73	113
Pennsylvania	1,430	714	496	143	30	45	99
Virginia	924	437	331	96	37	23	64
West Virginia	110	58	41	8	1	2	1
Great Lakes—Total	<u>6,870</u>	<u>2,918</u>	<u>2,902</u>	<u>711</u>	<u>202</u>	<u>137</u>	<u>462</u>
Illinois	1,690	740	713	166	53	18	109
Indiana	715	312	286	85	18	14	52
Michigan	1,180	497	481	119	34	49	82
Minnesota	839	322	368	95	43	11	68
North Dakota	170	60	78	30	1	1	11
Ohio	1,483	658	597	151	39	38	99
South Dakota	113	54	45	10	4	0	7
Wisconsin	680	275	334	55	10	6	34
New England—Total	<u>2,350</u>	<u>1,083</u>	<u>899</u>	<u>213</u>	<u>74</u>	<u>81</u>	<u>148</u>
Connecticut	590	290	202	46	32	20	42
Maine	224	107	88	20	5	4	16
Massachusetts	956	439	375	88	21	33	53
New Hampshire	326	139	126	40	10	11	23
Rhode Island	129	61	52	9	3	4	7
Vermont	125	47	56	10	3	9	7

TABLE 5 (continued)

ESTIMATED ACTIVE WOMEN PILOTS AND FLIGHT INSTRUCTORS BY FAA REGION AND STATE:
DECEMBER 31, 1986

FAA Region and State	Total Pilots	Students	Private	Commercial	Airline Transport	Miscellaneous ^{2/}	Flight Instructor ^{3/}
Northwest Mountain—Total	<u>4,454</u>	<u>1,923</u>	<u>1,815</u>	<u>660</u>	<u>138</u>	<u>138</u>	<u>290</u>
Colorado	1,335	629	667	139	51	69	104
Idaho	255	117	102	28	4	4	14
Montana	232	105	104	20	3	0	16
Oregon	746	282	365	62	11	19	36
Utah	245	113	97	17	12	10	12
Washington	1,475	504	627	154	54	36	100
Wyoming	164	77	73	15	3	0	8
Southern—Total	<u>6,312</u>	<u>2,994</u>	<u>2,361</u>	<u>572</u>	<u>257</u>	<u>142</u>	<u>374</u>
Alabama	410	201	154	26	2	25	17
Florida	2,801	1,266	1,076	295	100	60	190
Georgia	839	430	286	66	40	15	35
Kentucky	303	130	122	28	20	3	28
Mississippi	224	110	84	21	7	4	10
North Carolina	763	374	263	61	30	15	46
South Carolina	346	179	120	28	13	6	17
Tennessee	664	307	230	48	45	14	31
Southwest—Total	<u>4,815</u>	<u>2,148</u>	<u>1,995</u>	<u>428</u>	<u>164</u>	<u>100</u>	<u>280</u>
Arkansas	300	142	117	34	6	1	20
Louisiana	441	216	145	52	15	13	37
New Mexico	432	190	164	35	12	31	25
Oklahoma	702	297	313	63	14	10	44
Texas	2,940	1,303	1,256	244	92	45	150
Western-Pacific—Total	<u>9,185</u>	<u>3,745</u>	<u>3,985</u>	<u>867</u>	<u>288</u>	<u>280</u>	<u>567</u>
Arizona	1,159	482	489	113	31	64	68
California	7,408	2,966	3,287	712	229	214	454
Hawaii	238	118	64	29	13	14	20
Nevada	380	179	145	33	13	10	25
Outside U.S.—Total ^{4/}	<u>430</u>	<u>180</u>	<u>135</u>	<u>75</u>	<u>18</u>	<u>19</u>	<u>31</u>
Other U.S. Areas	<u>77</u>	<u>42</u>	<u>18</u>	<u>9</u>	<u>5</u>	<u>3</u>	<u>0</u>
Guam	12	8	3	1	0	0	0
Puerto Rico	64	26	7	6	3	2	0
Virgin Island	21	8	8	2	2	1	0

^{1/} Includes Outside U.S.^{2/} Includes helicopter, glider, and lighter-than-air.^{3/} Not included in total.^{4/} Other U.S. Areas are included in Outside U.S. Total.

TABLE 5a
ESTIMATED ACTIVE WOMEN PILOTS AND FLIGHT INSTRUCTORS BY FAA REGION AND STATE:
DECEMBER 31, 1985

FAA Region and State	Total Pilots	Students	Private	Commercial	Airline Transport	Miscellaneous 2/	Flight Instructor 3/
Total 1/	<u>43,483</u>	<u>19,058</u>	<u>17,974</u>	<u>4,185</u>	<u>1,184</u>	<u>1,082</u>	<u>2,731</u>
United States--Total	<u>43,049</u>	<u>18,861</u>	<u>17,832</u>	<u>4,119</u>	<u>1,167</u>	<u>1,070</u>	<u>2,707</u>
Alaskan Region--Total	<u>957</u>	<u>441</u>	<u>408</u>	<u>81</u>	<u>21</u>	<u>6</u>	<u>44</u>
Central - Total	<u>2,004</u>	<u>809</u>	<u>946</u>	<u>176</u>	<u>40</u>	<u>33</u>	<u>110</u>
Iowa	427	170	207	43	1	6	19
Kansas	592	237	284	49	13	9	31
Missouri	719	303	321	58	22	15	48
Nebraska	266	99	134	26	4	3	12
Eastern--Total	<u>5,021</u>	<u>2,682</u>	<u>2,205</u>	<u>600</u>	<u>144</u>	<u>190</u>	<u>399</u>
Delaware	84	32	42	7	1	2	5
District of Columbia	71	31	30	4	5	1	6
Maryland	703	316	276	74	24	13	49
New Jersey	915	410	337	100	25	43	59
New York	1,672	747	650	174	29	72	114
Pennsylvania	1,372	665	493	144	30	40	101
Virginia	883	415	330	91	30	17	63
West Virginia	121	66	47	6	0	2	2
Great Lakes--Total	<u>6,924</u>	<u>2,988</u>	<u>2,924</u>	<u>706</u>	<u>175</u>	<u>131</u>	<u>469</u>
Illinois	1,754	775	721	187	47	24	109
Indiana	687	298	281	82	15	11	52
Michigan	1,212	535	486	117	30	44	84
Minnesota	804	305	369	86	35	9	63
North Dakota	176	74	72	28	2	0	14
Ohio	1,481	670	592	149	31	39	107
South Dakota	120	55	57	7	1	0	3
Wisconsin	690	276	346	50	14	4	37
New England--Total	<u>2,281</u>	<u>1,069</u>	<u>865</u>	<u>215</u>	<u>62</u>	<u>70</u>	<u>147</u>
Connecticut	588	289	200	55	25	19	41
Maine	213	107	79	17	7	3	14
Massachusetts	952	446	374	88	16	28	47
New Hampshire	289	124	111	34	10	10	27
Rhode Island	103	47	41	11	2	2	9
Vermont	136	56	60	10	2	8	9

TABLE 5a (Continued)
ESTIMATED ACTIVE BOMB PILOTS AND PILOT INSTRUCTORS BY PMA REGION AND STATE:
DECEMBER 31, 1985

PMA Region and State	Total Pilots	Students	Private	Commercial	Airline Transport	Miscellaneous ²	Pilot Instructor ³
Northwest Mountain--Total:	<u>4,543</u>	<u>1,942</u>	<u>1,914</u>	<u>425</u>	<u>118</u>	<u>144</u>	<u>290</u>
Colorado	1,392	666	484	132	40	70	10*
Idaho	244	107	104	28	2	3	17
Montana	244	110	108	21	4	1	15
Oregon	761	295	380	54	11	21	35
Utah	238	105	100	11	10	12	11
Washington	1,491	581	660	163	50	37	96
Wyoming	171	78	76	16	1	0	9
Southern--Total:	<u>6,119</u>	<u>2,891</u>	<u>2,315</u>	<u>565</u>	<u>229</u>	<u>119</u>	<u>350</u>
Alabama	404	194	158	29	4	19	20
Florida	2,778	1,237	1,096	295	100	50	16*
Georgia	775	387	275	62	34	17	36
Kentucky	284	118	122	27	15	2	27
Mississippi	198	104	67	17	6	4	12
North Carolina	688	355	243	58	22	10	36
South Carolina	349	180	123	28	12	6	19
Tennessee	643	314	231	49	36	11	33
Southwest--Total:	<u>5,011</u>	<u>2,228</u>	<u>2,107</u>	<u>441</u>	<u>133</u>	<u>102</u>	<u>312</u>
Arkansas	308	128	135	34	7	2	22
Louisiana	478	225	173	55	14	11	45
New Mexico	430	192	170	30	9	29	20
Oklahoma	703	273	335	65	21	9	51
Texas	3,092	1,410	1,294	255	82	51	174
Western-Pacific--Total:	<u>9,389</u>	<u>3,811</u>	<u>4,148</u>	<u>910</u>	<u>245</u>	<u>275</u>	<u>586</u>
Arizona	1,118	466	487	95	26	44	56
California	7,647	3,050	3,441	754	195	207	484
Hawaii	245	114	76	24	14	13	26
Nevada	379	179	144	35	10	11	20
Outside U.S.--Total ^{4/}	<u>434</u>	<u>197</u>	<u>142</u>	<u>66</u>	<u>17</u>	<u>12</u>	<u>24</u>
Other U.S. Areas	<u>76</u>	<u>42</u>	<u>19</u>	<u>8</u>	<u>4</u>	<u>3</u>	<u>0</u>
Guam	12	9	2	1	0	0	0
Puerto Rico	39	22	6	5	3	3	0
Virgin Island	25	11	11	2	1	0	0

^{1/} Includes Outside U.S.

^{2/} Includes helicopter, glider, and lighter-than-air.

^{3/} Not included in total.

^{4/} Other U.S. Areas are included in Outside U.S. Total.

TABLE 6

ESTIMATED ACTIVE HELICOPTER PILOTS BY CLASS OF CERTIFICATES
DECEMBER 31, 1986

Class of Certificates	Number of Certificates Held
Total	<u>31,697</u>
Private Helicopter	892
Private Gyroplane, Private Airplane	25
Private Helicopter, Private Airplane	1,288
Private Helicopter, Private Airplane, Private Glider	47
Private Airplane, Commercial Gyroplane, Commercial Helicopter	1
Private Airplane, Private Glider, Commercial Helicopter	33
Private Gyroplane	9
Private Airplane, Commercial Glider, Commercial Helicopter	14
Commercial Helicopter	7,230
Commercial Helicopter, Private Airplane	3,805
Commercial Airplane, Commercial Helicopter	15,335
Commercial Airplane, Private Helicopter	262
Commercial Airplane, Private Glider, Commercial Helicopter	156
Commercial Airplane, Commercial Glider, Commercial Helicopter	609
Commercial Helicopter, Private Glider	6
Commercial Helicopter, Commercial Glider	6
Commercial Gyroplane, Commercial Airplane	21
Commercial Airplane, Commercial Gyroplane, Commercial Glider	1
Commercial Airplane, Commercial Gyroplane, Commercial Helicopter	23
Commercial Airplane, Commercial Gyroplane, Commercial Helicopter Commercial Glider	9
Commercial Helicopter, Commercial Gyroplane	2
Commercial Airplane, Commercial Glider, Private Helicopter	16
Airline Transport Helicopter	435
Airline Transport Airplane, Airline Transport Helicopter	1,472

TABLE 6a

**ESTIMATED ACTIVE HELICOPTER PILOTS BY CLASS OF CERTIFICATES
DECEMBER 31, 1985**

Class of Certificates	Number of Certificates Held
Total	<u>31,206</u>
Private Helicopter	808
Private Gyroplane, Private Airplane	29
Private Helicopter, Private Airplane	1,236
Private Helicopter, Private Airplane, Private Glider	48
Private Airplane, Commercial Gyroplane, Commercial Helicopter	1
Private Airplane, Private Glider, Commercial Helicopter	21
Private Gyroplane	5
Private Airplane, Commercial Glider, Commercial Helicopter	16
 Commercial Helicopter	 6,862
Commercial Helicopter, Private Airplane	3,713
Commercial Airplane, Commercial Helicopter	15,550
Commercial Airplane, Private Helicopter	245
Commercial Airplane, Private Glider, Commercial Helicopter	162
Commercial Airplane, Commercial Glider, Commercial Helicopter	614
Commercial Helicopter, Private Glider	5
Commercial Helicopter, Commercial Glider	9
Commercial Gyroplane, Commercial Airplane	23
Commercial Airplane, Commercial Gyroplane, Commercial Glider	1
Commercial Airplane, Commercial Gyroplane, Commercial Helicopter	25
Commercial Airplane, Commercial Gyroplane, Commercial Helicopter Commercial Glider	7
Commercial Helicopter, Commercial Gyroplane	2
Commercial Airplane, Commercial Glider, Private Helicopter	19
 Airline Transport Helicopter	 432
Airline Transport Airplane, Airline Transport Helicopter	1,373

TABLE 7
ESTIMATED ACTIVE GLIDER PILOTS BY CLASS OF CERTIFICATES
DECEMBER 31, 1986

Class of Certificates	Number of Certificates Held
Total	<u>20,355</u>
Private Glider	7,168
Private Airplane, Private Glider	4,144
Private Airplane, Commercial Glider	772
Private Airplane, Private Glider, Private Helicopter	47
Private Airplane, Private Glider, Commercial Helicopter	33
Private Airplane, Commercial Glider, Commercial Helicopter	14
Private Glider, Commercial Airplane	2,148
Private Glider, Commercial Airplane, Commercial Helicopter	156
Private Glider, Commercial Helicopter	6
Commercial Glider	1,243
Commercial Airplane, Commercial Glider	3,983
Commercial Airplane, Commercial Glider, Private Helicopter	16
Commercial Airplane, Commercial Glider, Commercial Helicopter	609
Commercial Helicopter, Commercial Glider	6
Commercial Airplane, Commercial Gyroplane, Commercial Glider, Commercial Helicopter	9
Commercial Airplane, Commercial Gyroplane, Commercial Glider	1

TABLE 7a

ESTIMATED ACTIVE GLIDER PILOTS BY CLASS OF CERTIFICATES
DECEMBER 31, 1985

Class of Certificates	Number of Certificates Held
Total	<u>20,308</u>
Private Glider	7,000
Private Airplane, Private Glider	4,234
Private Airplane, Commercial Glider	767
Private Airplane, Private Glider, Private Helicopter	48
Private Airplane, Private Glider, Commercial Helicopter	21
Private Airplane, Commercial Glider, Commercial Helicopter	16
Private Glider, Commercial Airplane	2,164
Private Glider, Commercial Airplane, Commercial Helicopter	162
Private Glider, Commercial Helicopter	5
Commercial Glider	1,168
Commercial Airplane, Commercial Glider	4,073
Commercial Airplane, Commercial Glider, Private Helicopter	19
Commercial Airplane, Commercial Glider, Commercial Helicopter	614
Commercial Helicopter, Commercial Glider	9
Commercial Airplane, Commercial Gyroplane, Commercial Glider, Commercial Helicopter	7
Commercial Airplane, Commercial Gyroplane, Commercial Glider	1

TABLE 8
ESTIMATED ACTIVE HELICOPTER AND GLIDER PILOTS
DECEMBER 31, 1982-86

Calendar Year	Total Helicopter Pilots <u>1/</u>		Total Glider Pilots <u>2/</u>	
	Number	Percent Change	Number	Percent Change
1986	31,697	+2	20,355	+1
1985	31,206	+2	20,308	-2
1984	30,507	+1	20,733	+2
1983	30,090	+1	20,395	+3
1982	29,926	+2	19,806	+2

1/ Includes pilots with ratings to fly helicopters only.

2/ Includes pilots with ratings to fly gliders only.

TABLE 9
ESTIMATED TOTAL PILOTS AND INSTRUMENT RATED PILOTS
DECEMBER 31, 1982-86

Calendar Year	Total Pilots <u>1/</u>	Instrument Rated Pilots	
		Number	Percent of Total
1986	558,845	262,388	47
1985	562,828	258,559	46
1984	572,295	256,584	45
1983	570,807	254,271	45
1982	576,894	255,073	44

1/ Excludes student pilots.

TABLE 10
ESTIMATED ACTIVE PILOT CERTIFICATES HELD
BY CATEGORY AND AGE GROUP OF HOLDER
1986, 1985, 1982

Type of Pilot Certificates															
Age Group	Total Active Pilots			Student			Private			Commercial			Airline Transport		
	1986	1985	1982	1986	1985	1982	1986	1985	1982	1986	1985	1982	1986	1985	1982
Total	709,118	709,540	733,255	156,273	146,652	156,361	305,736	311,086	322,094	147,798	151,632	165,093	87,186	82,744	73,471
14-15	252	266	322	252	266	322	0	0	0	0	0	0	0	0	0
16-19	16,135	16,868	22,860	14,652	13,184	16,458	3,222	3,382	5,863	114	135	319	0	0	0
20-24	58,029	59,171	77,535	27,477	26,389	33,072	21,096	22,727	30,369	7,600	8,193	11,911	413	528	678
25-29	85,246	91,188	102,067	28,885	26,420	31,163	33,569	35,897	42,257	17,226	17,323	19,545	6,306	6,370	6,028
30-34	102,263	103,012	108,873	25,086	24,868	25,080	44,654	46,081	47,309	16,769	17,036	20,740	12,438	11,807	12,208
35-39	105,580	109,677	105,815	19,531	19,765	18,415	46,367	47,322	46,176	20,165	22,866	28,285	15,933	15,980	15,591
40-44	96,586	93,050	87,746	13,606	13,191	12,020	41,428	40,288	38,512	23,661	23,683	23,940	15,437	13,796	11,795
45-49	73,060	72,354	70,592	8,234	8,029	7,901	32,152	32,153	32,092	16,000	18,432	19,180	13,409	12,541	10,478
50-54	59,077	59,996	61,315	5,438	5,543	5,915	27,064	28,473	32,372	14,967	15,274	14,478	10,819	9,533	7,714
55-59	46,211	47,698	46,750	3,685	3,716	3,488	26,539	27,206	25,589	10,816	10,310	11,676	6,358	5,695	5,551
60 and over	58,699	56,260	45,378	3,427	3,281	2,527	29,645	27,557	21,555	16,496	18,380	15,015	6,031	6,094	5,315

Type of Pilot Certificates												
Age Group	Helicopter (Only)			Glider (Only) ^{1/}			Lighter-than-air ^{1/}			Flight Instructor ^{2/}		
	1986	1985	1982	1986	1985	1982	1986	1985	1982	1986	1985	1982
Total	8,581	8,123	7,034	8,411	8,168	7,842	1,133	1,139	1,360	57,355	58,940	62,492
14-15	0	0	0	0	0	0	0	0	0	0	0	0
16-19	23	20	10	105	130	185	18	17	25	48	65	117
20-24	869	785	805	518	500	592	37	45	108	4,033	4,379	6,205
25-29	2,379	2,178	1,740	741	847	1,093	138	153	239	7,700	8,218	9,805
30-34	1,672	1,572	1,831	1,397	1,399	1,322	247	249	363	8,301	8,640	10,064
35-39	1,775	1,965	1,590	1,495	1,485	1,143	306	312	270	8,978	9,859	10,620
40-44	1,118	944	591	1,137	978	748	199	176	144	8,633	8,330	7,780
45-49	418	407	268	737	698	589	90	94	86	6,275	6,251	6,085
50-54	173	153	128	582	574	654	54	46	54	4,984	4,946	4,574
55-59	81	77	55	665	660	592	27	34	25	3,469	3,363	3,224
60 and over	49	38	16	1,034	857	924	17	13	26	4,934	4,885	4,018

^{1/} Glider and lighter-than-air pilots are not required to have a medical examination; however, totals above represent pilots who received a medical examination.

^{2/} Not included in total active pilots.

TABLE 11

ESTIMATED INSTRUMENT RATING HELD BY CLASS OF CERTIFICATES
DECEMBER 31, 1986 AND 1985

Class of Certificates	1985	1986	Percent Change 1986-1985
Total—all groups	<u>258,558</u>	<u>262,386</u>	<u>1</u>
Private Pilots—Total	<u>43,902</u>	<u>45,672</u>	<u>4</u>
Private Airplane (only)	40,330	41,947	4
Private Airplane, Private Glider	954	955	*
Private Airplane, Commercial Glider	85	95	12
Private Airplane, Private Helicopter	313	318	2
Private Airplane, Private Glider, Private Helicopter	16	20	25
Private Airplane, Commercial Helicopter	2,180	2,302	6
Private Airplane, Private Gyroplane	2	2	0
Private Airplane, Private Glider, Commercial Helicopter	11	20	82
Private Airplane, Commercial Glider, Commercial Helicopter	10	12	20
Private Airplane, Other	1	1	0
Commercial Pilots—Total	<u>126,352</u>	<u>123,556</u>	<u>-2</u>
Commercial Airplane (only)	106,522	103,913	-2
Commercial Airplane, Private Glider	1,826	1,825	0
Commercial Airplane, Commercial Glider	3,318	3,227	-3
Commercial Airplane, Private Helicopter	208	224	8
Commercial Airplane, Commercial Helicopter	13,723	13,624	-1
Commercial Airplane, Private Glider, Commercial Helicopter	151	143	-5
Commercial Airplane, Commercial Glider, Commercial Helicopter	545	545	0
Commercial Airplane, Commercial Gyroplane	14	13	-7
Commercial Airplane, Commercial Helicopter, Commercial Gyroplane	18	16	-11
Commercial Airplane, Commercial Gyroplane, Commercial Glider	1	1	0
Commercial Airplane, Commercial Glider, Private Helicopter	15	15	0
Commercial Airplane, Commercial Gyroplane, Commercial Helicopter			
Commercial Glider	7	9	29
Airline Transport Pilots—Total	<u>82,740</u>	<u>87,186</u>	<u>5</u>
Airline Transport Airplane	81,367	85,714	5
Airline Transport Airplane, Airline Transport Helicopter	1,373	1,472	7
Rotorcraft Pilots—Total	<u>5,565</u>	<u>5,971</u>	<u>7</u>
Commercial Helicopter	5,472	5,873	7
Airline Transport Helicopter	82	89	9
Rotorcraft Other	11	9	18

TABLE 12

ESTIMATED INSTRUMENT RATINGS HELD, BY CLASS OF CERTIFICATES, BY FAA REGION: DECEMBER 31, 1966

Class of Certificate	Total ^{1/}	Alaskan	Central	Eastern	Great Lakes	New England	Northwest Mountain	Southern	Southwest	Western Pacific	Outside U.S. ^{2/}
Total—all groups	262,386	3,570	12,188	33,897	38,897	11,789	23,376	48,531	34,202	45,531	10,400
Private Pilots—Total	45,672	345	2,599	6,423	8,924	2,138	3,484	7,500	5,436	8,564	257
Private Airplane (only)	41,947	286	2,411	5,893	8,476	1,983	3,158	6,616	4,945	7,943	226
Private Airplane, Private Glider	955	6	36	171	158	60	63	137	86	224	6
Private Airplane, Commercial Glider	95	0	2	19	8	12	12	5	9	23	0
Private Airplane, Private Helicopter	316	1	19	37	40	14	25	72	54	54	2
Private Airplane, Private Glider											
Private Helicopter	20	0	1	4	3	2	2	1	2	5	0
Private Airplane, Commercial Helicopter	2,302	51	125	295	235	66	219	654	338	305	10
Private Airplane, Private Gyroplane	2	0	1	0	0	1	0	0	0	0	0
Private Airplane, Private Glider											
Commercial Helicopter	20	0	0	3	1	0	4	7	0	5	0
Private Airplane, Commercial Glider											
Commercial Helicopter	12	1	0	1	2	0	0	4	1	3	0
Private Airplane, Other	1	0	0	0	1	0	0	0	0	0	0
Commercial Pilots—Total	123,559	2,145	6,188	15,891	16,441	5,165	11,188	22,541	16,581	21,726	3,573
Commercial Airplane (only)	103,913	1,813	5,331	13,272	16,347	4,393	9,276	18,226	13,982	17,966	3,307
Commercial Airplane, Private Glider	1,825	17	75	283	248	77	184	295	194	438	14
Commercial Airplane, Commercial Glider	3,227	19	135	486	438	181	374	500	375	690	29
Commercial Airplane, Private Helicopter	224	4	7	24	44	10	23	44	25	38	5
Commercial Airplane, Commercial Helicopter	13,624	280	611	1,816	1,265	471	1,253	3,374	1,923	2,425	206
Commercial Airplane, Private Glider											
Commercial Helicopter	143	0	7	20	26	5	15	25	15	24	2
Commercial Airplane, Commercial Glider, Commercial Helicopter	549	10	20	86	61	26	58	92	60	127	9

TABLE 12 (Continued)

ESTIMATED INSTRUMENT RATINGS HELD, BY CLASS OF CERTIFICATES, BY FAA REGION: DECEMBER 31, 1986

Class of Certificate	Total ^{1/}	Alaskan	Central	Eastern	Great Lakes	New England	Northwest Mountain	Southern	Southwest	Western Pacific	Outside U.S. ^{2/}
Commercial Airplane, Commercial Gyroplane	13	0	0	1	1	1	2	0	2	5	0
Commercial Airplane, Commercial Helicopter, Commercial Gyroplane	16	1	1	0	5	1	2	0	3	3	0
Commercial Airplane, Commercial Gyroplane, Commercial Glider	1	0	0	0	0	0	0	0	0	1	0
Commercial Airplane, Commercial Glider, Private Helicopter	15	0	1	3	5	0	0	0	1	4	1
Commercial Airplane, Commercial Gyroplane, Commercial Helicopter, Commercial Glider	9	1	0	0	1	0	0	1	1	5	0
Airline Transport Pilots—Total	<u>87,186</u>	<u>974</u>	<u>3,130</u>	<u>10,602</u>	<u>11,011</u>	<u>4,245</u>	<u>8,281</u>	<u>16,452</u>	<u>11,365</u>	<u>14,572</u>	<u>6,510</u>
Airline Transport Airplane	85,714	936	3,058	10,349	10,876	4,145	8,165	16,214	11,107	14,353	6,467
Airline Transport Airplane, Airline Transport Helicopter	1,472	36	32	253	135	104	112	278	258	219	43
Rotorcraft Pilots—Total	<u>5,971</u>	<u>106</u>	<u>271</u>	<u>861</u>	<u>521</u>	<u>237</u>	<u>423</u>	<u>1,978</u>	<u>818</u>	<u>673</u>	<u>63</u>
Commercial Helicopter	5,873	104	265	868	509	232	415	1,961	791	664	56
Airline Transport Helicopter	89	2	1	12	11	4	4	14	26	6	7
Other	9	0	1	1	1	1	0	3	1	1	0

^{1/} Includes Outside U.S. total.^{2/} Outside U.S. includes airmen certificated by FAA who live outside the 50 states or foreign countries.

TABLE 12a

ESTIMATED INSTRUMENT RATING HELD, BY CLASS OF CERTIFICATE, BY FRA REGION: DECEMBER 31, 1985

Class of Certificate	Total 1/	Alaskan	Central	Eastern	Great Lakes	New England	Northwest Mountain	Southern	Southwest	Western Pacific	Outside U.S. 2/
Total--all groups	258,559	3,570	12,164	33,390	38,392	11,325	23,045	46,927	34,574	44,981	10,186
Private Pilots--Total	43,902	293	2,575	6,221	8,759	1,928	3,409	7,087	5,317	8,068	245
Private Airplane (only)	40,330	239	2,391	5,704	8,330	1,785	3,090	6,231	4,874	7,509	227
Private Airplane, Private Glider	954	7	40	179	163	55	59	133	93	219	6
Private Airplane, Commercial Glider	85	0	2	19	5	10	13	6	9	21	0
Private Airplane, Private Helicopter	313	0	18	37	39	19	30	62	48	59	1
Private Airplane, Private Glider											
Private Helicopter	16	0	0	3	4	0	4	1	1	3	0
Private Airplane, Commercial Helicopter	2,180	46	120	278	211	58	213	646	342	255	11
Private Airplane, Private Gyroplane	2	0	1	0	0	1	0	0	0	0	0
Private Airplane, Private Glider											
Commercial Helicopter	11	0	2	1	2	0	0	4	0	2	0
Private Airplane, Commercial Glider											
Commercial Helicopter	10	1	1	0	4	0	0	4	0	0	0
Private Airplane, Other	1	0	0	0	1	0	0	0	0	0	0
Commercial Pilots--Total	126,352	2,173	6,329	16,419	18,920	5,118	11,431	22,639	17,332	22,331	3,687
Commercial Airplane (only)	106,522	1,822	5,482	13,733	16,785	4,383	9,492	18,293	14,621	18,508	3,403
Commercial Airplane, Private Glider	1,826	20	68	287	249	74	186	283	198	445	16
Commercial Airplane, Commercial Glider	3,318	19	129	504	478	176	368	514	389	708	33
Commercial Airplane, Private Helicopter	208	3	7	19	42	8	24	40	25	37	3
Commercial Airplane, Commercial Helicopter	13,723	297	615	1,763	1,266	442	1,278	3,359	2,023	2,469	211
Commercial Airplane, Private Glider											
Commercial Helicopter	151	1	7	22	26	5	15	30	17	26	2
Commercial Airplane, Commercial Glider, Commercial Helicopter	549	9	20	84	61	27	61	98	53	125	11

TABLE 12a (Continued)
ESTIMATED INSTANTANEOUS RAYTAGE FIELD, BY CLASS OF CERTIFICATE, BY FAA REGION: DECEMBER 31, 1983

Class of Certificate	Total ^{1/}	Alaskan	Central	Eastern	Great Lakes	New England	Northwest Mountain	Southern	Southwest	Western Pacific	Outside U.S. ^{2/}
Commercial Airplane, Commercial Gyroplane	14	0	0	1	1	1	4	1	2	4	0
Commercial Airplane, Commercial Helicopter, Commercial Gyroplane	16	1	1	1	6	1	2	1	2	3	0
Commercial Airplane, Commercial Gyroplane, Commercial Glider	1	0	0	0	0	0	0	0	0	1	0
Commercial Airplane, Commercial Glider, Private Helicopter	15	0	0	3	5	0	1	0	2	3	1
Commercial Airplane, Commercial Gyroplane, Commercial Helicopter	7	1	0	2	1	1	0	0	0	2	0
Commercial Glider											
Airline Transport Pilots--Total	82,740	1,002	3,020	9,977	10,261	4,083	7,751	15,382	11,140	12,918	6,204
Airline Transport Airplane	81,367	965	2,988	9,745	10,137	3,983	7,653	15,122	10,892	12,710	6,172
Airline Transport Airplane, Airline Transport Helicopter	1,373	37	32	232	124	100	100	260	248	208	32
Motorcraft Pilots--Total	5,565	102	240	773	452	196	456	1,839	786	664	57
Commercial Helicopter	5,472	99	240	759	440	192	450	1,824	763	653	52
Airline Transport Helicopter	82	3	0	11	11	3	5	12	22	10	5
Other	11	0	0	3	1	1	1	3	1	1	0

1/ Includes Outside U.S. total.

2/ Outside U.S. includes airmen certificated by FAA who live outside the 50 states or foreign countries.

II. ACTIVE NONPILOT CERTIFICATES HELD

TABLE 13
ESTIMATED ACTIVE NONPILOT AIRMEN CERTIFICATES HELD, BY FAA REGION AND STATE:
DECEMBER 31, 1986 ^{1/}

FAA Region and State	Total Nonpilot Airmen	Mechanic	Parachute Rigger	Ground Instructor	Dispatcher	Flight Navigator	Flight Engineer
Total ^{2/}	410,079	284,241	9,535	59,443	9,025	1,512	46,323
United States—Total	390,768	271,294	9,387	58,026	7,190	1,396	43,475
Alaskan Region—Total	4,410	3,079	154	726	139	5	307
Central—Total	20,918	16,210	421	3,035	143	12	1,097
Iowa	2,602	1,513	86	508	9	0	84
Kansas	5,924	4,587	103	910	39	4	281
Missouri	10,690	8,466	161	1,296	92	4	671
Nebraska	1,702	1,244	69	321	3	4	61
Eastern—Total	60,359	43,369	1,606	8,298	1,880	233	4,673
Delaware	1026	728	26	151	14	5	102
District of Columbia	329	200	20	76	16	0	17
Maryland	3,719	2,304	134	759	45	16	461
New Jersey	11,133	7,624	238	1,373	405	67	1,426
New York	23,548	18,503	376	2,565	1,042	68	993
Pennsylvania	13,791	10,282	351	1,955	221	42	940
Virginia	5,901	3,118	412	1,212	133	34	992
West Virginia	912	610	49	207	4	0	42
Great Lakes—Total	53,400	36,320	1,216	9,454	813	46	5,551
Illinois	14,983	9,668	277	2,451	282	15	2,290
Indiana	5,179	3,715	182	915	44	5	318
Michigan	8,493	5,957	187	1,771	84	10	484
Minnesota	9,158	6,014	138	1,234	260	4	1,508
North Dakota	803	600	25	146	3	0	27
Ohio	9,957	7,109	260	1,923	99	6	560
South Dakota	843	589	21	192	1	1	39
Wisconsin	3,984	2,668	126	820	40	5	325
New England—Total	18,076	12,367	342	2,612	234	163	2,358
Connecticut	5,418	3,398	81	748	78	110	1003
Maine	1,238	819	38	231	21	8	121
Massachusetts	8,148	6,371	162	1,023	83	13	496
New Hampshire	1,911	881	31	346	26	23	604
Rhode Island	775	543	19	139	8	3	63
Vermont	586	355	11	125	18	6	71
Northwest-Mountain—Total	33,934	21,595	1,285	5,302	443	148	5,161
Colorado	10,335	6,215	159	1,684	182	27	2,068
Idaho	1,531	999	155	285	8	3	81
Montana	1,844	1,109	271	371	4	4	85
Oregon	3,736	2,631	235	623	31	29	187
Utah	2,330	1,526	79	364	12	4	345
Washington	13,247	8,461	355	1,812	196	78	2,345
Wyoming	911	654	31	163	10	3	50

TABLE 13 (Continued)

ESTIMATED ACTIVE NONPILOT AIRMEN CERTIFICATES HELD, BY FAA REGION AND STATE:
DECEMBER 31, 1986 ^{1/}

FAA Region and State	Total Nonpilot Airmen	Mechanic	Parachute Rigger	Ground Instructor	Dispatcher	Flight Navigator	Flight Engineer
Southern—Total	68,692	45,616	1,828	9,897	1,559	252	9,544
Alabama	5,140	4,045	128	809	10	7	141
Georgia	14,337	9,078	280	1,437	249	15	3,278
Florida	32,571	22,271	541	4,465	1014	199	4,076
Kentucky	2,224	1,396	160	429	30	2	207
Mississippi	1,520	1,035	42	344	6	3	90
North Carolina	5,630	3,436	419	1,009	99	14	653
South Carolina	2,176	1,326	93	465	15	5	272
Tennessee	5,094	3,029	165	934	131	7	823
Southwest—Total	52,533	37,102	958	8,039	606	84	5,744
Arkansas	2,150	1,503	66	442	12	2	125
Louisiana	4,538	3,361	93	663	38	5	358
New Mexico	1,963	1,308	64	467	21	4	99
Oklahoma	11,486	9,665	164	1,315	29	8	305
Texas	32,396	21,265	571	5,132	506	65	4,857
Western-Pacific—Total	78,446	55,636	1,577	10,663	1,373	453	8,744
Arizona	7,742	5,442	183	1,309	189	21	598
California	65,624	46,927	1,282	8,538	1,029	367	7,481
Hawaii	2,609	1,888	59	331	115	5	203
Nevada	2,471	1,379	53	485	36	56	462
Outside U.S.—Total ^{3/}	19,311	12,947	148	1,417	1,835	116	2,848
Other U.S. Areas—Total	1,486	1,128	34	187	54	0	63
American Samoa	5	2	0	1	0	0	2
Canal Zone	39	16	18	3	2	0	0
Guam	139	75	3	23	5	0	33
Puerto Rico	1,158	926	11	135	44	0	42
Wake Island	9	9	0	0	0	0	0
Virgin Island	136	100	2	25	3	0	6

^{1/} Data for flight engineers and flight navigators represent total active ratings held. Data for dispatchers, mechanics, parachute riggers and ground instructors represent total ratings issued to date. These ratings retain their validity.^{2/} Includes Outside U.S.^{3/} Outside U.S. includes Other U.S. Areas outside the 50 states and foreign countries.

TABLE 13a
ESTIMATED ACTIVE NONPILOT AIRMAN CERTIFICATES HELD, BY FAA REGION AND STATE:
DECEMBER 31, 1985 1/

FAA Region and State	Total Nonpilot Airmen	Mechanic	Parachute Rigger	Ground Instructor	Dispatcher	Flight Navigator	Flight Engineer
Total 2/	395,139	274,100	9,395	58,214	8,511	1,542	43,377
United States--Total	376,682	261,547	9,249	56,841	6,731	1,429	40,896
Alaskan Region--Total	4,353	3,028	149	732	129	5	310
Central--Total	20,343	15,754	421	2,993	134	13	1,026
Iowa	2,540	1,844	85	495	10	0	78
Kansas	5,870	4,537	100	910	37	4	282
Missouri	10,274	8,146	164	1,265	86	5	608
Nebraska	1,459	1,205	68	323	1	4	58
Eastern--Total	58,846	42,428	1,583	8,106	1,800	244	4,685
Delaware	977	699	25	146	13	5	89
District of Columbia	322	197	18	76	16	0	15
Maryland	3,526	2,203	137	733	34	13	406
New Jersey	10,961	7,415	238	1,371	405	74	1,458
New York	23,204	18,236	371	2,547	1,011	69	970
Pennsylvania	13,395	10,122	344	1,873	195	46	815
Virginia	5,575	2,960	402	1,157	124	37	895
West Virginia	886	596	48	203	2	0	37
Great Lakes--Total	51,387	34,939	1,212	9,296	715	45	5,180
Illinois	14,530	9,424	277	2,397	266	15	2,151
Indiana	4,975	3,557	181	915	38	5	279
Michigan	8,056	5,640	186	1,718	72	9	431
Minnesota	8,747	5,754	136	1,199	214	4	1,440
North Dakota	772	578	25	144	3	0	22
Ohio	9,465	6,885	260	1,907	87	5	521
South Dakota	808	554	21	194	1	1	37
Wisconsin	3,834	2,547	126	822	34	6	299
New England--Total	17,567	12,038	340	2,575	214	159	2,241
Connecticut	5,256	3,290	80	739	63	109	975
Maine	1,182	786	37	225	21	5	108
Massachusetts	7,969	6,230	163	1,014	75	15	452
New Hampshire	1,862	847	30	341	28	24	592
Rhode Island	766	540	19	133	9	3	62
Vermont	552	345	11	123	18	3	52
Northwest-Mountain--Total	32,514	20,761	1,264	5,149	416	148	4,756
Colorado	9,744	5,905	151	1,607	165	29	1,887
Idaho	1,501	988	148	279	8	4	74
Montana	1,764	1,054	273	363	2	3	69
Oregon	3,449	2,557	235	619	32	30	176
Utah	2,202	1,433	79	359	10	5	316
Washington	12,768	8,197	347	1,780	188	74	2,182
Wyoming	886	627	31	162	11	3	52

TABLE 13a (Continued)
ESTIMATED ACTIVE NONPILOT AIRMAN CERTIFICATES HELD, BY FAA REGION AND STATE:
DECEMBER 31, 1965 ^{1/}

FAA Region and State	Total Nonpilot Airmen	Mechanic	Parachute Rigger	Ground Instructor	Dispatcher	Flight Navigator	Flight Engineer
Southern--Total	65,444	43,487	1,790	9,579	1,445	265	9,878
Alabama	4,909	3,847	130	796	8	7	121
Georgia	13,696	8,729	272	1,404	235	13	3,043
Florida	31,340	21,379	532	4,336	956	213	3,924
Kentucky	2,069	1,288	158	418	22	2	181
Mississippi	1,481	996	43	350	5	3	84
North Carolina	5,212	3,179	404	961	85	15	568
South Carolina	2,011	1,229	91	442	11	6	232
Tennessee	4,726	2,840	160	872	123	6	725
Southwest--Total	50,358	35,503	944	7,939	560	83	5,329
Arkansas	2,063	1,430	62	437	13	3	118
Louisiana	4,514	3,352	93	689	37	4	339
New Mexico	1,878	1,249	62	458	18	4	87
Oklahoma	10,784	8,956	164	1,317	32	9	306
Texas	31,119	20,516	563	5,038	460	63	4,479
Western-Pacific--Total	75,870	53,602	1,546	10,452	1,318	467	8,485
Arizona	7,397	5,235	182	1,231	181	17	551
California	63,649	45,230	1,259	8,440	994	381	7,345
Hawaii	2,498	1,834	58	316	114	12	164
Nevada	2,326	1,303	47	465	29	57	425
Outside U.S.--Total ^{2/}	18,457	12,558	146	1,373	1,780	113	2,487
Other U.S. Areas--Total	1,451	1,105	36	183	54	0	73
American Samoa	4	2	0	1	0	0	1
Canal Zone	40	16	19	3	2	0	0
Guam	137	77	3	24	6	0	27
Puerto Rico	1,140	913	12	131	44	0	40
Wake Island	9	9	0	0	0	0	0
Virgin Island	121	88	2	24	2	0	5

^{1/} Data for flight engineers and flight navigators represent total active ratings held. Data for dispatchers, mechanics, parachute riggers and ground instructors represent total ratings issued to date. These ratings retain their validity.

^{2/} Includes Outside U.S.

^{3/} Outside U.S. includes Other U.S. Areas outside the 50 states and foreign countries.

TABLE 14
ESTIMATED ACTIVE WOMEN NONPILOT CERTIFICATES HELD, BY FAA REGION AND STATE:
DECEMBER 31, 1986 ^{1/}

FAA Region and State	Total Nonpilot Women	Mechanic	Parachute Rigger	Ground Instructor	Dispatcher	Flight Engineer
Total ^{2/}	<u>6,502</u> ^{3/}	<u>1,964</u>	<u>414</u>	<u>3,087</u>	<u>460</u>	<u>577</u>
United States—Total	<u>6,416</u> ^{3/}	<u>1,955</u>	<u>408</u>	<u>3,041</u>	<u>440</u>	<u>572</u>
Alaskan Region—Total	<u>118</u>	<u>26</u>	<u>11</u>	<u>48</u>	<u>24</u>	<u>9</u>
Central—Total	<u>299</u>	<u>131</u>	<u>17</u>	<u>139</u>	<u>4</u>	<u>8</u>
Iowa	<u>68</u>	<u>35</u>	<u>1</u>	<u>31</u>	<u>1</u>	<u>0</u>
Kansas	<u>97</u>	<u>45</u>	<u>5</u>	<u>46</u>	<u>0</u>	<u>1</u>
Missouri	<u>108</u>	<u>46</u>	<u>7</u>	<u>46</u>	<u>2</u>	<u>7</u>
Nebraska	<u>26</u>	<u>5</u>	<u>4</u>	<u>16</u>	<u>1</u>	<u>0</u>
Eastern—Total	<u>820</u>	<u>168</u>	<u>79</u>	<u>398</u>	<u>113</u>	<u>62</u>
Delaware	<u>17</u>	<u>7</u>	<u>1</u>	<u>8</u>	<u>1</u>	<u>0</u>
District of Columbia	<u>11</u>	<u>0</u>	<u>1</u>	<u>7</u>	<u>1</u>	<u>2</u>
Maryland	<u>84</u>	<u>14</u>	<u>4</u>	<u>49</u>	<u>4</u>	<u>13</u>
New Jersey	<u>116</u>	<u>28</u>	<u>7</u>	<u>46</u>	<u>21</u>	<u>10</u>
New York	<u>280</u>	<u>68</u>	<u>13</u>	<u>128</u>	<u>61</u>	<u>14</u>
Pennsylvania	<u>175</u>	<u>31</u>	<u>20</u>	<u>95</u>	<u>17</u>	<u>12</u>
West Virginia	<u>14</u>	<u>8</u>	<u>0</u>	<u>4</u>	<u>1</u>	<u>1</u>
Virginia	<u>123</u>	<u>12</u>	<u>33</u>	<u>61</u>	<u>7</u>	<u>10</u>
Great Lakes—Total	<u>1,088</u>	<u>353</u>	<u>58</u>	<u>523</u>	<u>65</u>	<u>89</u>
Illinois	<u>302</u>	<u>95</u>	<u>14</u>	<u>143</u>	<u>16</u>	<u>34</u>
Indiana	<u>104</u>	<u>16</u>	<u>18</u>	<u>51</u>	<u>6</u>	<u>13</u>
Michigan	<u>185</u>	<u>49</u>	<u>6</u>	<u>109</u>	<u>9</u>	<u>12</u>
Minnesota	<u>130</u>	<u>44</u>	<u>5</u>	<u>43</u>	<u>21</u>	<u>17</u>
North Dakota	<u>14</u>	<u>3</u>	<u>0</u>	<u>8</u>	<u>1</u>	<u>2</u>
Ohio	<u>261</u>	<u>125</u>	<u>11</u>	<u>109</u>	<u>8</u>	<u>8</u>
South Dakota	<u>14</u>	<u>2</u>	<u>0</u>	<u>12</u>	<u>0</u>	<u>0</u>
Wisconsin	<u>78</u>	<u>19</u>	<u>4</u>	<u>48</u>	<u>4</u>	<u>3</u>
New England—Total	<u>287</u>	<u>84</u>	<u>12</u>	<u>148</u>	<u>12</u>	<u>31</u>
Connecticut	<u>96</u>	<u>31</u>	<u>4</u>	<u>39</u>	<u>7</u>	<u>15</u>
Maine	<u>22</u>	<u>4</u>	<u>1</u>	<u>15</u>	<u>1</u>	<u>1</u>
Massachusetts	<u>117</u>	<u>35</u>	<u>5</u>	<u>64</u>	<u>3</u>	<u>10</u>
New Hampshire	<u>34</u>	<u>11</u>	<u>1</u>	<u>17</u>	<u>1</u>	<u>4</u>
Rhode Island	<u>8</u>	<u>1</u>	<u>0</u>	<u>6</u>	<u>0</u>	<u>1</u>
Vermont	<u>10</u>	<u>2</u>	<u>1</u>	<u>7</u>	<u>0</u>	<u>0</u>
Northwest—Mountain—Total	<u>602</u>	<u>195</u>	<u>26</u>	<u>274</u>	<u>26</u>	<u>81</u>
Colorado	<u>201</u>	<u>67</u>	<u>1</u>	<u>80</u>	<u>12</u>	<u>41</u>
Idaho	<u>24</u>	<u>6</u>	<u>2</u>	<u>14</u>	<u>1</u>	<u>1</u>
Montana	<u>30</u>	<u>5</u>	<u>4</u>	<u>20</u>	<u>0</u>	<u>1</u>
Oregon	<u>65</u>	<u>13</u>	<u>8</u>	<u>43</u>	<u>1</u>	<u>0</u>
Utah	<u>42</u>	<u>13</u>	<u>6</u>	<u>16</u>	<u>1</u>	<u>6</u>
Washington	<u>225</u>	<u>87</u>	<u>4</u>	<u>93</u>	<u>9</u>	<u>32</u>
Wyoming	<u>15</u>	<u>4</u>	<u>1</u>	<u>8</u>	<u>2</u>	<u>0</u>

TABLE 14 (Continued)

ESTIMATED ACTIVE WOMEN NONPILOT CERTIFICATES HELD, BY FAA REGION AND STATE:
DECEMBER 31, 1986 ^{1/}

FAA Region and State	Total Nonpilot Women	Mechanic	Parachute Rigger	Ground Instructor	Dispatcher	Flight Engineer
Southern—Total	<u>1,120</u>	<u>265</u>	<u>114</u>	<u>529</u>	<u>93</u>	<u>119</u>
Alabama	108	19	4	84	1	0
Georgia	122	29	7	54	8	24
Florida	475	141	14	211	65	44
Kentucky	68	18	10	29	3	8
Mississippi	22	4	1	16	0	1
North Carolina	143	29	39	61	5	9
South Carolina	41	5	4	23	3	6
Tennessee	158	20	35	51	8	27
Southwest—Total	<u>819</u>	<u>284</u>	<u>45</u>	<u>403</u>	<u>30</u>	<u>57</u>
Arkansas	30	5	0	23	0	2
Louisiana	80	29	2	39	6	4
New Mexico	54	13	3	34	2	2
Oklahoma	157	67	8	76	0	6
Texas	498	170	32	231	22	43
Western-Pacific—Total	<u>1,263</u> ^{2/}	<u>449</u>	<u>46</u>	<u>579</u>	<u>73</u>	<u>116</u>
Arizona	136	39	5	78	7	7
California	1047 ^{3/}	396	39	459	56	97
Hawaii	50	7	0	26	9	8
Nevada	30	7	2	16	1	4
Outside U.S.—Total ^{4/}	<u>86</u>	<u>9</u>	<u>6</u>	<u>46</u>	<u>20</u>	<u>5</u>
Other U.S. Areas—Total	<u>7</u>	<u>3</u>	<u>0</u>	<u>4</u>	<u>0</u>	<u>0</u>
Puerto Rico	5	3	0	2	0	0
Virgin Island	2	0	0	2	0	0

^{1/} Data for flight engineers and flight navigators represent total active ratings held. Data for dispatchers, mechanics, parachute riggers, and ground instructors represent total ratings issued to date. These ratings retain their validity.

^{2/} Includes Outside U.S.

^{3/} Includes one woman from California with a current flight navigator certificate.

^{4/} Outside U.S. includes Other U.S. Areas outside of the 50 states and foreign countries.

TABLE 14a
ESTIMATED ACTIVE WOMEN NONPILOT CERTIFICATES HELD, BY FAA REGION AND STATE:
DECEMBER 31, 1985 ^{1/}

FAA Region and State	Total Nonpilot Women	Mechanic	Parachute Rigger	Ground Instructor	Dispatcher	Flight Engineer
Total ^{2/}	<u>6,017</u> ^{3/}	<u>1,775</u>	<u>412</u>	<u>2,980</u>	<u>394</u>	<u>455</u>
United States--Total	<u>5,936</u> ^{3/}	<u>1,764</u>	<u>406</u>	<u>2,938</u>	<u>375</u>	<u>452</u>
Alaskan Region--Total	<u>113</u>	<u>23</u>	<u>11</u>	<u>47</u>	<u>21</u>	<u>11</u>
Central--Total	<u>275</u>	<u>116</u>	<u>15</u>	<u>134</u>	<u>3</u>	<u>7</u>
Iowa	61	29	1	30	1	0
Kansas	89	40	4	43	1	1
Missouri	102	42	7	46	1	6
Nebraska	23	5	3	15	0	0
Eastern--Total	<u>757</u>	<u>154</u>	<u>81</u>	<u>379</u>	<u>99</u>	<u>44</u>
Delaware	15	5	1	8	1	0
District of Columbia	9	0	1	6	1	1
Maryland	69	11	5	42	4	7
New Jersey	101	25	7	44	14	11
New York	267	64	14	123	59	7
Pennsylvania	167	30	20	93	13	11
West Virginia	13	8	0	4	1	0
Virginia	116	11	33	59	6	7
Great Lakes--Total	<u>1,003</u>	<u>312</u>	<u>58</u>	<u>504</u>	<u>52</u>	<u>77</u>
Illinois	281	86	13	141	12	29
Indiana	90	13	18	43	5	11
Michigan	175	43	6	107	7	12
Minnesota	121	42	6	42	17	14
North Dakota	11	2	0	7	1	1
Ohio	240	109	11	107	7	6
South Dakota	14	2	0	12	0	0
Wisconsin	71	15	4	45	3	4
New England--Total	<u>262</u>	<u>74</u>	<u>12</u>	<u>141</u>	<u>10</u>	<u>25</u>
Connecticut	84	27	4	38	4	11
Maine	25	5	1	16	1	2
Massachusetts	101	30	5	57	3	6
New Hampshire	33	9	1	18	1	4
Rhode Island	8	1	0	5	0	2
Vermont	11	2	1	7	1	0
Northwest-Mountain--Total	<u>547</u>	<u>185</u>	<u>24</u>	<u>261</u>	<u>20</u>	<u>57</u>
Colorado	173	62	1	77	8	25
Idaho	23	7	2	13	1	0
Montana	28	4	3	20	0	1
Oregon	64	15	8	40	1	0
Utah	35	11	5	15	0	4
Washington	209	81	4	89	8	27
Wyoming	15	5	1	7	2	0

TABLE 14a (Continued)

ESTIMATED ACTIVE WOMEN NONPILOT CERTIFICATES HELD, BY FAA REGION AND STATE:
DECEMBER 31, 1985 ^{1/}

FAA Region and State	Total Nonpilot Women	Mechanic	Parachute Rigger	Ground Instructor	Dispatcher	Flight Engineer
Southern--Total	<u>1,051</u>	<u>238</u>	<u>115</u>	<u>517</u>	<u>82</u>	<u>99</u>
Alabama	108	16	4	85	1	2
Georgia	109	27	7	54	4	17
Florida	449	130	14	204	61	40
Kentucky	66	18	10	28	4	6
Mississippi	22	4	1	16	0	1
North Carolina	125	21	38	58	2	6
South Carolina	36	5	4	22	2	3
Tennessee	136	17	37	50	8	24
Southwest--Total	<u>756</u>	<u>254</u>	<u>44</u>	<u>398</u>	<u>23</u>	<u>37</u>
Arkansas	27	4	0	21	0	2
Louisiana	82	35	2	40	5	0
New Mexico	48	11	2	34	1	0
Oklahoma	148	56	8	76	2	6
Texas	451	148	32	227	15	29
Western-Pacific--Total	<u>1,172</u> ^{2/}	<u>408</u>	<u>46</u>	<u>557</u>	<u>65</u>	<u>95</u>
Arizona	119	34	6	68	6	5
California	<u>984</u> ^{3/}	<u>363</u>	<u>38</u>	<u>449</u>	<u>50</u>	<u>83</u>
Hawaii	45	5	0	28	8	4
Nevada	24	6	2	12	1	3
Outside U.S.--Total ^{4/}	<u>81</u>	<u>11</u>	<u>6</u>	<u>42</u>	<u>19</u>	<u>3</u>
Other U.S. Areas--Total	<u>6</u>	<u>3</u>	<u>0</u>	<u>3</u>	<u>0</u>	<u>0</u>
Puerto Rico	4	3	0	1	0	0
Virgin Island	2	0	0	2	0	0

^{1/} Data for flight engineers and flight navigators represent total active ratings held. Data for dispatchers, mechanics, parachute riggers, and ground instructors represent total ratings issued to date. These ratings retain their validity.

^{2/} Includes Outside U.S.

^{3/} Includes one woman from California with a current flight navigator certificate.

^{4/} Outside U.S. includes Other U.S. Areas outside of the 50 states and foreign countries.

III. PILOT CERTIFICATES ISSUED

TABLE 15

PILOT CERTIFICATES ISSUED, BY CATEGORY: CALENDAR YEARS 1982-1986

Category of Certificates	1982		1983		1984		1985		1986	
	Original	Additional	Original	Additional	Original	Additional	Original	Additional	Original	Additional
Pilot—Total	163,733	36,699	150,419	30,898	141,763	30,469	136,585	28,420	141,625	32,628
Student	90,816	0	92,239	0	90,085	0	86,060	0	86,699	0
Private	52,144	16,276	41,210	12,721	36,545	11,784	35,402	11,686	34,816	12,672
Commercial	11,048	11,910	8,789	9,513	7,702	8,892	8,404	7,197	8,689	9,241
Airline Transport	5,037	7,956	5,643	8,187	5,099	9,335	6,081	9,192	6,498	10,372
Helicopter (only)	2,256	330	1,932	315	1,806	319	2,105	207	2,209	234
Glider (only)	793	184	606	162	524	139	537	138	514	109
Lighter-Than-Air	1,639 ^{1/}	43 ^{1/}	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Nonpilot—Total ^{2/}	19,466	6,267	15,702	5,420	15,438	4,808	16,432	4,713	16,470	5,010
Mechanic	15,622	5,636	11,676	4,470	10,719	4,042	10,559	3,429	10,996	3,289
Parachute Rigger	215	31	214	13	149	12	157	9	149	11
Ground Instructor	1,882	383	1,524	371	1,283	293	1,359	343	1,386	323
Dispatcher	499	1	632	1	755	3	622	3	516	1
Flight Navigator	3	0	15	2	14	0	1	0	17	0
Flight Engineer	1,245	216	1,641	563	2,518	458	3,734	929	3,404	1,366
Flight Instructor										
Certificates ^{2/}	6,228	10,397	4,614	7,698	4,075	6,828	4,298	5,921	4,628	5,421
Instrument Ratings ^{3/}	0	14,517	0	11,078	0	10,845	0	11,673	0	13,688

^{1/} Revised.

N/A Not available.

Note: Additional ratings are entered on current airman certificates as follows:

Private, commercial, and airline transport pilot—aircraft category, class, and type instrument rating.

Helicopter pilot—instrument and type ratings.

Flight instructor—ratings for each aircraft category in which the holder is qualified, and for instrument flying instruction.

Mechanic—airframe and powerplant ratings.

Parachute rigger—senior or master rigger—senior or master rigger ratings.

Ground instructor—ratings for each subject in which the holder is qualified to give instruction.

Air traffic control tower operator—junior/senior ratings for airport where holder may control air traffic.

^{1/} Six month total.^{2/} Not included in total.^{3/} Special ratings shown on pilot certificates represented above; not included in total.

TABLE 16

PILOT CERTIFICATES ISSUED, BY CATEGORY AND CONSTRUCTOR: DECEMBER 31, 1986

Category of Certificates	Total Ratings Issued	Original Issuances				Additional Ratings			
		Total	Examiner	Inspector	No Test	Total	Examiner	Inspector	No Test
Total	195,733	158,095	55,702	90,717	11,726	37,638	30,743	3,822	3,073
Pilot—Total	174,253	141,625	43,568	90,429	7,628	32,628	26,939	3,621	2,068
Student	88,699	88,699	0	88,699	0	0	0	0	0
Private	47,488	34,816	31,495	79	3,242	12,672	12,056	51	565
Commercial	18,130	8,889	6,098	74	2,717	9,241	7,892	145	1,204
Airline Transport	16,870	6,498	4,759	1,473	266	10,372	6,766	3,388	218
Helicopter (only)	2,443	2,209	729	100	1,380	234	122	33	79
Glider (only)	623	514	487	4	23	105	103	4	2
Nonpilot—Total	21,480	16,470	12,134	288	4,098	5,010	3,804	201	1,005
Mechanic	14,287	10,998	8,776	15	2,207	3,289	3,066	2	219
Parachute Rigger	160	149	86	5	58	11	8	1	2
Ground Instructor	1,709	1,386	183	2	1,251	323	24	1	298
Dispatcher	517	516	359	59	98	1	1	0	0
Flight Navigator	17	17	3	2	12	0	0	0	0
Flight Engineer	4,790	3,404	2,727	205	472	1,386	703	197	486
Flight Instructor*	10,049	4,628	4,547	49	32	5,421	5,149	260	12

Note: Excludes Renewals

Additional ratings are entered on current airman certificates as follows:

Private, Commercial, and Airline Transport Pilot—Aircraft Category, Class and Type Instrument Rating.

Helicopter Pilot—Instrument and Type Ratings.

Flight Instructor—Ratings for each aircraft category in which the holder is qualified to instruct, and ratings for instrument flying instruction.

Mechanic—Airframe and Powerplant Ratings.

Parachute Rigger—Senior or Master Rigger Ratings.

Ground Instructor—Ratings for each subject in which the holder is qualified to give ground instruction.

Air Traffic Control Tower Operator—Junior/Senior Ratings for airports where holder may control air traffic.

*Special ratings shown on pilot certificates represented above, not included in total.

TABLE 16a

PILOT CERTIFICATES ISSUED, BY CATEGORY AND CONDUCTOR: DECEMBER 31, 1985

Category of Certificates	Total Ratings Issued	Original Issuances				Additional Ratings			
		Total	Examiner	Inspector	No Test	Total	Examiner	Inspector	No Test
Total	194,202	159,039	54,088	92,703	12,248	35,163	26,717	4,884	3,562
Pilot--Total	173,047	142,597	42,579	92,302	7,716	30,450	23,013	4,846	2,591
Student	90,085	90,085	0	90,085	0	0	0	0	0
Private	47,088	35,402	32,275	86	3,041	11,686	11,063	78	545
Commercial	17,067	8,404	5,562	100	2,742	8,663	7,028	197	1,438
Airline Transport	15,273	6,081	3,733	1,906	442	9,192	4,252	4,437	503
Helicopter (only)	2,859	2,088	536	114	1,438	771	536	131	104
Glider (only)	675	537	473	11	53	138	134	3	1
Nonpilot--Total	21,155	16,442	11,509	401	4,532	4,713	3,704	38	971
Mechanic	13,988	10,559	8,382	11	2,166	3,429	3,222	3	204
Parachute Rigger	166	157	89	14	54	9	7	0	2
Ground Instructor	1,712	1,369	136	1	1,232	343	31	0	312
Dispatcher	625	622	356	72	194	3	2	0	1
Flight Navigator	1	1	0	1	0	0	0	0	0
Flight Engineer	4,663	3,734	2,546	302	886	929	442	35	452
Flight Instructor*	10,219	4,298	4,150	90	58	5,921	5,578	332	11

Note: Excludes Renewals

Additional ratings are entered on current airman certificates as follows:

Private, Commercial, and Airline Transport Pilot--Aircraft Category, Class and Type Instrument Rating.

Helicopter Pilot--Instrument and Type Ratings.

Flight Instructor--Ratings for each aircraft category in which the holder is qualified to instruct, and ratings for instrument flying instruction.

Mechanic--Airframe and Powerplant Ratings.

Parachute Rigger-- Senior or Master Rigger Ratings.

Ground Instructor--Ratings for each subject in which the holder is qualified to give ground instruction.

Air Traffic Control Tower Operator--Junior/Senior Ratings for airports where holder may control air traffic.

*Special ratings shown on pilot certificates represented above, not included in total.

TABLE 17

INSTRUMENT RATINGS ISSUED: 1986, 1985, 1982

Class of Certificates	1986	1985	1982	Percent Change 1986-1985
Total—All Groups	<u>13,657</u>	<u>11,699</u>	<u>14,517</u>	<u>17</u>
Private Pilots—Total	<u>8,354</u>	<u>6,887</u>	<u>9,646</u>	<u>21</u>
Private Airplane (only)	7,840	6,438	8,902	22
Private Airplane, Private Glider	95	75	100	27
Private Airplane, Commercial Glider	1	1	6	0
Private Airplane, Private Helicopter	29	26	18	12
Private Airplane, Commercial Helicopter	178	172	217	3
Private Airplane, Other	211	175	402	21
Commercial Pilots—Total	<u>4,153</u>	<u>3,655</u>	<u>3,493</u>	<u>14</u>
Commercial Airplane (only)	3,437	2,981	2,751	15
Commercial Airplane, Private Glider	31	29	29	7
Commercial Airplane, Commercial Glider	31	32	44	-3
Commercial Airplane, Private Helicopter	5	11	1	-55
Commercial Airplane, Commercial Helicopter	666	586	646	14
Commercial Airplane, Private Glider, Commercial Helicopter	3	2	10	50
Commercial Airplane, Commercial Glider, Commercial Helicopter	9	11	11	-18
Commercial Airplane, Other	1	3	1	-67
Rotorcraft Pilots—Total	<u>1,150</u>	<u>1,157</u>	<u>1,378</u>	<u>-1</u>
Commercial Helicopter	1,145	1,156	1,365	-1
Commercial Helicopter, Airline Transport Helicopter	0	0	13	0
Commercial Helicopter, Private Glider	0	1	0	—
Commercial Helicopter, Commercial Glider	1	0	0	—
Commercial Helicopter, Other	4	0	0	—

TABLE 18
STUDENT CERTIFICATES ISSUED, BY MONTH: 1982 - 1986

Month	1982	1983	1984	1985	1986
Total	90,816	93,239	90,167 <u>r/</u>	86,060	88,706
January	6,306	6,511	7,485	6,414	6,641
February	6,208	6,146	6,338	5,233	5,590
March	7,600	7,724	7,086	6,805	6,472
April	7,081	6,737	6,931	7,492	7,482
May	7,559	7,650	7,784	7,749	7,415
June	8,997	5,344	8,533	8,279	8,211
July	9,143	9,253	9,202	9,245	9,648
August	8,781	10,426	9,559	8,252	8,886
September	8,532	9,971	7,781	7,973	8,961
October	7,978	8,040	8,129	7,892	8,133
November	7,165	6,500	6,291	5,579	5,809
December	5,466	4,937	5,048	4,455	5,452

r/ Revised

END

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